Colour television

Chassis
A02E
AA

Service
Service
Service

Service Manual

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Published by RB 0371 Service PaCE
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PHILIPS

1. Technical Specifications, Connections, and Chassis Overview

Index of this chapter:
1. Technical Specifications
2. Connections
3. Chassis Overview

Note: Figures below can deviate slightly from the actual situation, due to the different set executions.

1.1 Technical Specifications

1.1.1 Vision

Display type	: CRT, Real Flat
Screen size(s)	: 28 inch - 16:9
	: 29 inch - 4:3
	: 32 inch - 16:9
Tuning system	: PLL
IF frequency	: 38.9 MHz
Colour systems	: PAL: B/G,D/K,I
	: SECAM: B/G,D/K,L/L'
	: NTSC-playback
Channel selections	: 100 presets
	: UVSH
Aerial input	: 75 ohm, IEC-type

1.1.2 Sound

Sound systems	: FM-mono, AM-mono
	: FM-stereo: B/G
	: NICAM: B/G,D/K,I,L
Maximum power	: 4 x 10 W_rms (int.)

1.1.3 Miscellaneous

Mains voltage	: 220 - 240 Vac
Mains frequency	: 50 / 60 Hz
Ambient temperature	: +5 to +45 deg. C
Maximum humidity	: 90 % R.H.
Power consumption	:
- Normal operation	: ≈ 115 W
- Standby	: < 1 W

1.2 Connections

1.2.1 Front and Top Control, Side I/O Connections

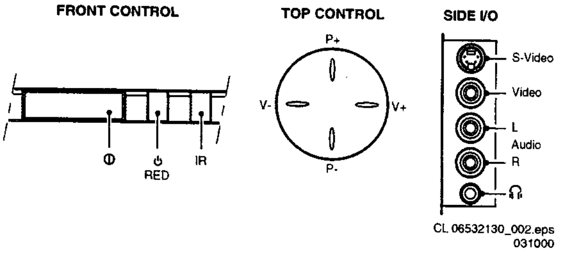

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Figure 1-1 Front and Top Control, Side I/O connections

Hosiden: SVHS - In

1	- Y	Ground	⏚
2	- C	Ground	⏚
3	- Y	1 Vpp / 75 ohm	→○
4	- C	0.3 Vpp / 75 ohm	→○

Cinch: In

- CVBS	1 Vpp / 75 ohm	→○◎
- Audio - L	0.5 Vrms / 10 kohm	→○◎
- Audio - R	0.5 Vrms / 10 kohm	→○◎

Mini Jack: Headphone - Out

- Headphone	32 - 600 ohm / 10 mW	◎/🎧

1.2.2 Rear Connections

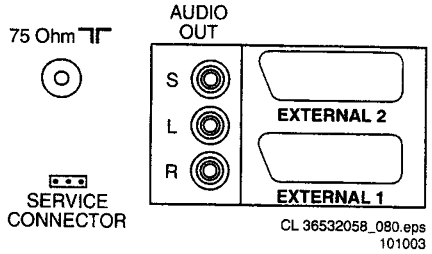

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Figure 1-2 Rear connections

Aerial - In

- IEC-type	Coax, 75 ohm	⫪

Service connector

1	- SDA-S	I2C data (5 V)	→○○→
2	- SCL-S	I2C clock (5 V)	→○
3	- GND	Ground	⏚

Audio - Out (Cinch)

S	- Surround	0.5 Vrms / 1 kohm (optional)	○→◎
L	- Audio - L	0.5 Vrms / 1 kohm	○→◎
R	- Audio - R	0.5 Vrms / 1 kohm	○→◎

External 1: RGB/YUV and CVBS - In/Out

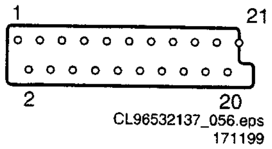

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Figure 1-3 SCART connector

1	- Audio - R	0.5 Vrms / 1 kohm	○→
2	- Audio - R	0.5 Vrms / 10 kohm	→○
3	- Audio - L	0.5 Vrms / 1 kohm	○→
4	- Audio	Ground	⏚
5	- Audio	Ground	⏚
6	- Audio - L	0.5 Vrms / 10 kohm	→○
7	- Blue / U	0.7 Vpp / 75 ohm	→○
8	- CVBS-status	0 - 1.3 V: INT 4.5 - 7 V: EXT 16:9 9.5 - 12 V: EXT 4:3	→○
9	- Video	Ground	⏚
10	- N.C.		
11	- Green / Y	0.7 Vpp / 75 ohm	→○
12	- N.C.		
13	- Video	Ground	⏚
14	- Video	Ground	⏚
15	- Red / V	0.7 Vpp / 75 ohm	→○
16	- Status / FBL	0 - 0.4 V: INT 1 - 3 V: EXT / 75 ohm	→○
17	- Video	Ground	⏚
18	- Video	Ground	⏚
19	- CVBS	1 Vpp / 75 ohm	○→
20	- CVBS	1 Vpp / 75 ohm	→○
21	- Shielding	Ground	⏚

External 2: CVBS and Y/C - In/Out (for recorder)

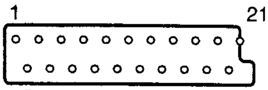

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Figure 1-4 SCART connector

1	- Audio - R	0.5 Vrms / 1 kohm	○→
2	- Audio - R	0.5 Vrms / 10 kohm	→○
3	- Audio - L	0.5 Vrms / 1 kohm	○→
4	- Audio	Ground	⏚
5	- Audio	Ground	⏚
6	- Audio - L	0.5 Vrms / 10 kohm	→○
7	- C-in	0.7 Vpp / 75 ohm	○→
8	- CVBS-status	0 - 1.3 V: INT 4.5 - 7 V: EXT 16:9 9.5 - 12 V: EXT 4:3	→○
9	- Video	Ground	⏚
10	- Easylink	(P50)	→○
11	- N.C.		
12	- N.C.		
13	- Video	Ground	⏚
14	- Video	Ground	⏚
15	- C	0.7 Vpp / 75 ohm	→○
16	- N.C.		
17	- Video	Ground	⏚
18	- Video	Ground	⏚
19	- CVBS-out	1 Vpp / 75 ohm	○→
20	- YCVBS-in	1 Vpp / 75 ohm	→○
21	- Shielding	Ground	⏚

1.3 Chassis Overview

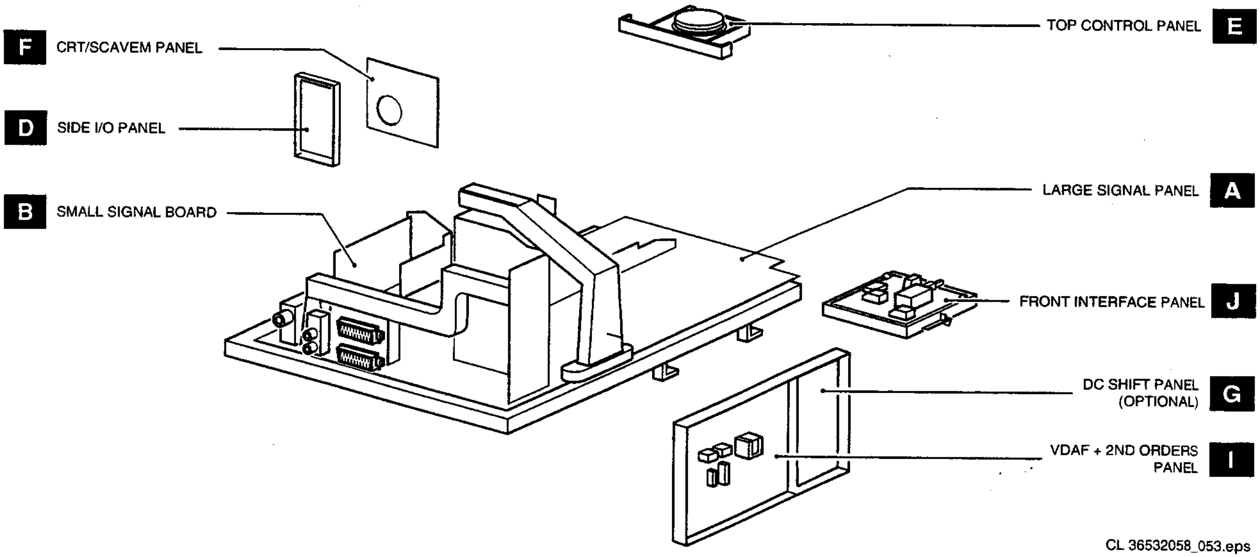
F CRT/SCAVEM PANEL
D SIDE I/O PANEL
B SMALL SIGNAL BOARD
TOP CONTROL PANEL E
LARGE SIGNAL PANEL A
FRONT INTERFACE PANEL J
DC SHIFT PANEL (OPTIONAL) G
VDAF + 2ND ORDERS PANEL I

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Figure 1-5 PWB location

2. Safety and Maintenance Instructions, Warnings, and Notes

2.1 Safety Instructions

Safety regulations require that **during** a repair:

- Due to the chassis concept, a very large part of the circuitry (incl. deflection) is 'hot'. Therefore, connect the set to the mains via an isolation transformer.
- Replace safety components, indicated by the symbol ⚠, only by components identical to the original ones. Any other component substitution (other than original type) may increase risk of fire or electrical shock hazard.
- Wear safety goggles when you replace the CRT.

Safety regulations require that **after** a repair, you must return the set in its original condition. Pay, in particular, attention to the following points:

- General repair instruction: as a strict precaution, we advise you to re-solder the solder connections through which the horizontal deflection current is flowing. In particular this is valid for the:
  1. Pins of the line output transformer (LOT).
  2. Fly-back capacitor(s).
  3. S-correction capacitor(s).
  4. Line output transistor.
  5. Pins of the connector with wires to the deflection coil.
  6. Other components through which the deflection current flows.

Note: This re-soldering is advised to prevent bad connections due to metal fatigue in solder connections, and is therefore only necessary for television sets more than two years old.

- Check the insulation of the mains cord for external damage.
- Check the strain relief of the mains cord for proper function, to prevent the cord from touching the CRT, hot components, or heat sinks.
- Check the electrical DC resistance between the mains plug and the secondary side (only for sets that have an isolated power supply). Do this as follows:
  1. Unplug the mains cord and connect a wire between the two pins of the mains plug.
  2. Turn on the main power switch (keep the mains cord unplugged!).
  3. Measure the resistance value between the pins of the mains plug and the metal shielding of the tuner or the aerial connection of the set. The reading should be between 4.5 Mohm and 12 Mohm.
  4. Switch the TV 'off' and remove the wire between the two pins of the mains plug.
- Check the cabinet for defects, to prevent the possibility of the customer touching any internal parts.

2.2 Maintenance Instructions

We recommend a maintenance inspection carried out by qualified service personnel. The interval depends on the usage conditions:

- When a customer uses the set under normal circumstances, for example in a living room, the recommended interval is three to five years.
- When a customer uses the set in an environment with higher dust, grease, or moisture levels, for example in a kitchen, the recommended interval is one year.
- The maintenance inspection includes the following actions:
  1. Perform the 'general repair instruction' noted above.
  2. Clean the power supply and deflection circuitry on the chassis.
  3. Clean the picture tube panel and the neck of the picture tube.

2.3 Warnings

- In order to prevent damage to ICs and transistors, avoid all high voltage flashovers. In order to prevent damage to the picture tube, use the method shown in Fig. 2-1, to discharge the picture tube. Use a high voltage probe and a multi-meter (position V_dc). Discharge until the meter reading is 0 V (after approx. 30 s).

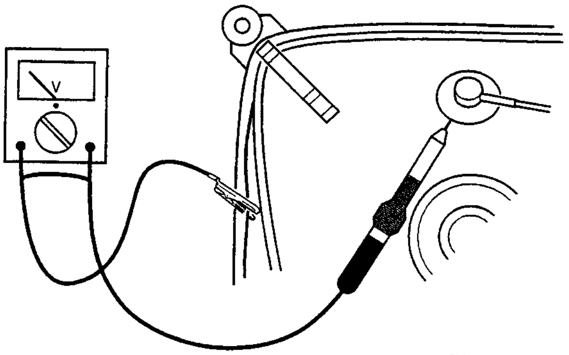

Figure 2-1 Discharge picture tube

- All ICs and many other semiconductors are susceptible to electrostatic discharges (ESD, ⚠). Careless handling during repair can reduce life drastically. Make sure that, during repair, you are connected with the same potential as the mass of the set by a wristband with resistance. Keep components and tools also at this potential. Available ESD protection equipment:
  - Complete kit ESD3 (small tablemat, wristband, connection box, extension cable and ground cable) 4822 310 10671.
  - Wristband tester 4822 344 13999.
- Together with the deflection unit and any multi-pole unit, flat square picture tubes form an integrated unit. The deflection and the multi-pole units are set optimally at the factory. We do not recommend adjusting this unit during repair.
- Be careful during measurements in the high voltage section and on the picture tube.
- Never replace modules or other components while the unit is 'on'.
- When you align the set, use plastic rather than metal tools. This will prevent any short circuits and the danger of a circuit becoming unstable.

2.4 Notes

2.4.1 General

- Measure the voltages and waveforms with regard to the chassis (= tuner) ground ⏚), or hot ground (⏚), depending on the tested area of circuitry.
- The voltages and waveforms shown in the diagrams are indicative. Measure them in the Service Default Mode (see chapter 5) with a colour bar signal and stereo sound (L: 3 kHz, R: 1 kHz unless stated otherwise) and picture carrier at 475.25 MHz (PAL) or 61.25 MHz (NTSC, channel 3).
- Where necessary, measure the waveforms and voltages with (⊓) and without (⋈) aerial signal. Measure the voltages in the power supply section both in normal operation (Ⓘ) and in standby (⏻). These values are indicated by means of the appropriate symbols.

- The picture tube panel has printed spark gaps. Each spark gap is connected between an electrode of the picture tube and the Aquadag coating.
- The semiconductors indicated in the circuit diagram and in the parts lists, are interchangeable per position with the semiconductors in the unit, irrespective of the type indication on these semiconductors.
- Manufactured under license from Dolby Laboratories. 'Dolby', 'Pro Logic' and the 'double-D symbol', are trademarks of Dolby Laboratories.

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Figure 2-2 Dolby PL Symbol

2.4.2 Schematic Notes

- All resistor values are in ohms and the value multiplier is often used to indicate the decimal point location (e.g. 2K2 indicates 2.2 kohm).
- Resistor values with no multiplier may be indicated with either an "E" or an "R" (e.g. 220E or 220R indicates 220 ohm).
- All capacitor values are expressed in micro-farads (μ= x 10^-6), nano-farads (n= x 10^-9), or pico-farads (p= x 10^-12).
- Capacitor values may also use the value multiplier as the decimal point indication (e.g. 2p2 indicates 2.2 pF).
- An "asterisk" (*) indicates component usage varies. Refer to the diversity tables for the correct values.
- The correct component values are listed in the Electrical Replacement Parts List. Therefore, always check this list when there is any doubt.

2.4.3 Rework on BGA (Ball Grid Array) ICs

General

Although (LF)BGA assembly yields are very high, there may still be a requirement for component rework. By rework, we mean the process of removing the component from the PWB and replacing it with a new component. If an (LF)BGA is removed from a PWB, the solder balls of the component are deformed drastically so the removed (LF)BGA has to be discarded.

Device removal

As is the case with any component that, it is essential when removing an (LF)BGA, the board, tracks, solder lands, or surrounding components are not damaged. To remove an (LF)BGA, the board must be uniformly heated to a temperature close to the reflow soldering temperature. A uniform temperature reduces the chance of warping the PWB.
To do this, we recommend that the board is heated until it is certain that all the joints are molten. Then carefully pull the component off the board with a vacuum nozzle. For the appropriate temperature profiles, see the IC data sheet.

Area preparation

When the component has been removed, the vacant IC area must be cleaned before replacing the (LF)BGA.
Removing an IC often leaves varying amounts of solder on the mounting lands. This excessive solder can be removed with either a solder sucker or solder wick. The remaining flux can be removed with a brush and cleaning agent.
After the board is properly cleaned and inspected, apply flux on the solder lands and on the connection balls of the (LF)BGA.
Note: Do not apply solder paste, as this has shown to result in problems during re-soldering.

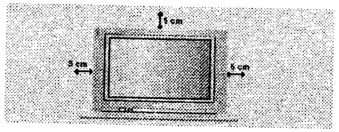
Device replacement

The last step in the repair process is to solder the new component on the board. Ideally, the (LF)BGA should be aligned under a microscope or magnifying glass. If this is not possible, try to align the (LF)BGA with any board markers.
To reflow the solder, apply a temperature profile according to the *IC data sheet*. So as not to damage neighbouring components, it may be necessary to reduce some temperatures and times

3. Directions for Use

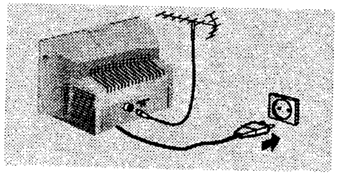
Installing your television set

❶ Positioning the television set



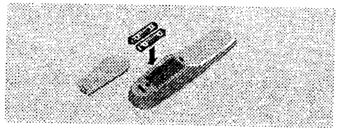
Place your TV on a solid, stable surface, leaving a space of at least 5 cm around the appliance. To avoid accidents, do not put anything on the set such as a cloth or cover, a container full of liquid (vase) or a heat source (lamp).
The set must not be exposed to water.

❷ Connections



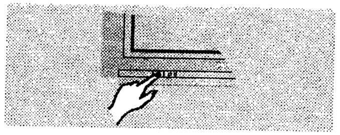
- Insert the aerial plug into the ⊤ socket at the rear of the set.
  If you are using an indoor aerial, reception may be difficult in certain conditions. You can improve reception by rotating the aerial. If the reception remains poor, you will need to use an external aerial.
- Insert the mains plug into a wall socket (220-240 V / 50 Hz).

❸ Remote control



Insert the two R6-type batteries (supplied) making sure that they are the right way round.
Check that the mode selector is set to TV.
The batteries supplied with this appliance do not contain mercury or nickel cadmium.
If you have access to a recycling facility, please do not discard your used batteries (if in doubt, consult your dealer). When the batteries are replaced, use the same type.

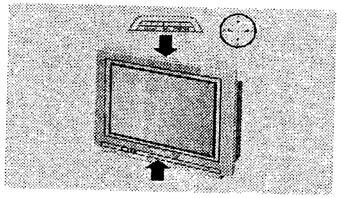
❹ Switching on



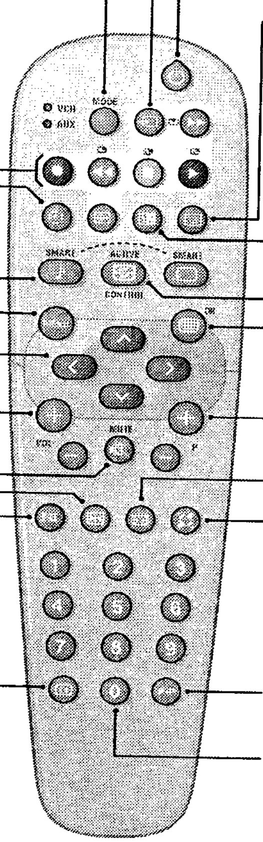
To switch on the set, press the on/off key.
A red indicator comes on and the screen lights up. Go straight to the chapter Quick installation on page 4.
If the television remains in standby mode, press **P** ⊕ on the remote control.
The indicator will flash when you use the remote control.

The keys on the TV set

The television set has 4 or 5 keys which are located on the front or the top of the set depending on the model.
The VOLUME - + (- ◢ +) keys are used to adjust sound levels. The PROGRAM - + (- **P** +) keys are used to select the required programmes.
To access the menus, simultaneously hold down the ◢ - and ◢ + keys (or MENU key).
The PROGRAM - + keys may then be used to select an adjustment and the - ◢ + keys to make that adjustment.
To exit from the menus, hold down the 2 ◢ - and ◢ + keys (or MENU key).
Note: when the **Child Lock** *function is activated, these keys are unavailable (refer to* **Features** *menu on page 7).*



Remote control keys



Select peripherals (p.10)
Press several times to select the required EXT connector.

Mode selector (p. 11)
To activate the remote control in TV, VCR (video recorder) or DVD mode.

Teletext keys (p. 8) or VCR / DVD (p.11)

Sleeptimer
To select the length of time before the set automatically switches to standby (from 0 to 240 minutes)

Smart picture and sound
Used to access a series of predefined picture and sound settings.
The **personal** *position relates to settings selected from the menus.*

Menu
To call up or exit the menus.

Cursor
These 4 keys are used to move around the menus.

Volume
To adjust the sound level

Mute
To mute or restore the sound.

Freeze the picture

Sound mode
Used to force programmes in **Stereo** and **Nicam Stereo** to **Mono** or, for bilingual programmes, to choose between **Dual I** or **Dual II**.
The **Mono** *indication is red when in forced position.*

Screen information
To display / remove the programme number, the name (if it exists), the time, the sound mode and the time remaining on the timer. Hold down for 5 seconds to permanently display the programme number on the screen. The volume level and the smart control adjustments are then displayed each time they are used.

Standby
To set the TV to standby mode.
To switch the TV set on again, press ⏻, P ⊖ ⊕ or ⓪ ⑨.

List of programmes
To display/clear the list of programmes. Use the keys ⌃ ⌄ to select a programme and the key › to display it.
The symbol 🔒 is displayed alongside all programmes which are locked (p.7).

Dual screen *(according to the version)*
To activate/disable the display on 2 screens. The second screen displays teletext.

Active Control *(according to the version)*
Optimizes the quality of the picture according to the quality of reception.

Teletext (p. 8)

Programme selection
To access the next or previous TV channel from the list of Favourite Programmes (see p. 5).

16:9 Format (p. 9)

Surround Sound
To activate / deactivate the surround sound effect. In stereo, this gives the impression that the speakers are further apart. For models equipped with Virtual Dolby Surround*, you can experience Dolby Surround Pro Logic sound effects. In mono, a stereo spatial effect is simulated.

Previous programme
To return to the previous programme.

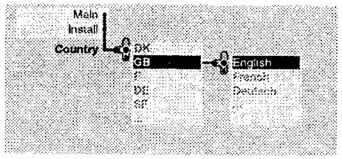
Digit keys
Direct access to the programmes. For a 2 digit programme, enter the 2nd digit before the dash disappears.

** Manufactured under license from Dolby Laboratories.*
"Dolby" and the double-D symbols are trademarks of Dolby Laboratories.

Quick installation

Plug & Play

When you turn on the TV set for the first time, a menu is displayed on screen.
This menu prompts you to select the country and language for the menus:



If the menu is not displayed, press and hold down the ◢- and ◢+ keys on the TV set for 5 seconds to display the menu.

❶ Use the (▲)(▼) keys on the remote control to select your country and validate with (▶).
If your country does not appear in the list, select choice ". . ."

❷ Next select your language using the (▲)(▼) keys and validate with (▶).

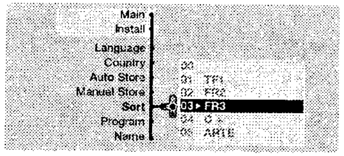
❸ The search starts automatically. All the available TV programmes will be stored.
This operation takes a few minutes.
The display shows the progress of the search and the number of programs found. At the end of the search, the menu disappears.
To exit or interrupt the search, press (MENU). If no programme is found, consult the possible solutions p. 12.

❹ If the transmitter or cable network sends the automatic sort signal, the programs will be numbered correctly. In this case, the installation is complete.

❺ If this is not the case, you need to use the **Sort** menu to number the programs correctly.
Some transmitters or cable networks broadcast their own sort parameters (region, language, etc.). In this case, indicate your choice using the (▲)(▼) keys and validate with (▶).

Program sort

❶ Press key (MENU). The **Main menu** is displayed on the screen.



❷ With the cursor, select the **Install** menu followed by the **Sort** menu.

❸ Select the programme you want to move using the (▲)(▼) keys and press (▶).

❹ Then use the (▲)(▼) keys to select the new number and validate with (◀).

❺ Repeat steps ❸ and ❹ for each program you wish to renumber.

❻ To quit the menus, press (⊡).

Program name

If required, you can give a name to the programmes and external connectors.
Note: on installation, the programs are named automatically when an identification signal is sent.

❶ Press the (MENU) key.

❷ With the cursor, select the **Install** menu, then **Name**

❸ Use the ⊖ **P** ⊕ keys to select the programme to name or rename.

❹ Use the (◀)(▶) keys to move around the name display area (5 characters) and the (▲)(▼) keys to select the characters.

❺ When the name has been entered, use the (◀) key to exit. The name is stored.

❻ Repeat steps ❸ to ❺ for each programme you wish to name.

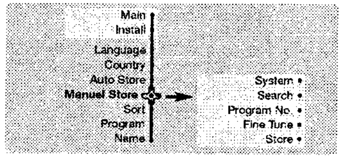
❼ To quit the menus, press (⊡).

Manual store

This menu is used to store the programmes one at a time.

❶ Press the (MENU) key.

❷ With the cursor, select the **Install** menu then **Manual store**:



❸ **System:** select **Europe** (automatic detection*) or **Western Europe** (BG standard), **Eastern Europe** (DK standard), **United Kingdom** (I standard) or **France** (LL' standard).

** Except for France (LL' standard), you must select choice* **France**.

❹ **Search:** press (▶). The search starts. Once a programme is found, the scanning stops and its name is displayed (when available). Go to the next step. If you know the frequency of the required programme, this can be entered directly using the (0) to (9) keys.
If no picture is found, consult the possible solutions (p. 12).

❺ **Program No.:** enter the required number with the (◀)(▶) or (0) to (9) keys.

❻ **Fine Tune:** if the reception is not satisfactory, adjust using the (◀)(▶) keys.

❼ **Store:** press (▶). The program is stored.

❽ Repeat steps ❹ to ❼ for each programme to store.

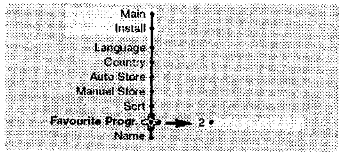
❾ To quit the menus, press (⊡).

Favourite programmes

This menu allows you to select the programmes to be accessed with the ⊖ **P** ⊕ key.

❶ Press the (MENU) key.

❷ With the cursor, select the **Install** menu then **Favourite Progr.** and press (▶).



The list of favourite programmes is displayed. The programmes that were stored at installation will automatically appear on this list.

❸ Use the up/downcursor to select the required programme.

❹ Use the left/right cursor to add or remove a programme from the list.

❺ Run through steps ❸ and ❹ for each programme to be added or removed from the list.

❻ To exit, press (⊡) several times.

Other settings in the Install menu

❶ Press the (MENU) key and select the **Install** menu:

❷ **Language:** to change the display language for the menus.

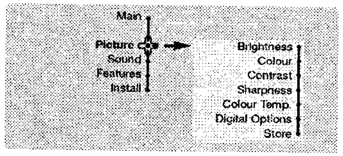
❸ **Country:** to select your country (**GB** for Great Britain).
This setting is used for the search, automatic programme sort and teletext display. If your country does not appear in the list, select ". . ."

❹ **Auto Store:** to start automatic search for all programmes available in your region. If the transmitter or cable network sends the automatic sort signal, the programmes will be numbered correctly. If this is not the case, you need to use the Sort menu to renumber the programmes (see p. 4).
Some transmitters or cable networks broadcast their own sort parameters (region, language, etc.). In this case, indicate your choice using the (▲)(▼) keys and validate with (▶). To quit or interrupt the search, press (MENU). If no picture is found, consult the possible solutions (p. 12).

❺ To quit the menus, press (⊡).

Picture settings

❶ Press (MENU) then (>). The **Picture** menu is displayed:



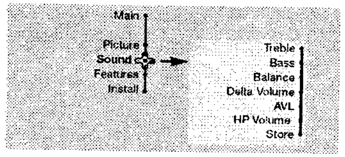
❷ Use the (∧)(∨) keys to select a setting and the (<)(>) keys to adjust.
Note: during the picture adjustment, only the selected line remains displayed. Press (∧)(∨) to display the menu again.

❸ Once the adjustments have been made, select **Store** and press (>) to store them.
Press (⊜) to exit.

Description of the adjustments:
- **Brightness:** this changes picture brilliance.
- **Colour:** this changes the intensity of the colour.
- **Contrast:** this changes the difference between the light and dark tones.
- **Sharpness:** this changes the picture definition.
- **Colour Temp.:** this changes the colour rendering: **Cold** (bluer), **Normal** (balanced) or **Warm** (redder).
- **Digital Options:**
  - **100 Hz:** 100 Hz processing.
  - **Double lines:** doubling of vertical resolution which removes visible picture lines.
    Advised for NTSC (60Hz) pictures.
- **Store:** to store the picture adjustments and settings.

Sound adjustments

❶ Press (MENU), select Sound ((∨)) and press (>).
The **Sound** menu is displayed:



❷ Use the (∧)(∨) keys to select a setting and the (<)(>) keys to adjust.

❸ Once the adjustments have been made, select Store and press (>) to store these changes.

❹ To quit the menus, press (⊜).

Description of the settings:
- **Treble:** this alters the high frequency sounds.
- **Bass:** this alters the low frequency sounds.
- **Balance:** this balances the sound on the left and right speakers.
- **Delta Volume** : this is used to compensate any volume discrepancies between the different programs or EXT sockets.
  This setting is available for programs 0 to 40 and the EXT sockets.
- **AVL** (Automatic Volume Leveller): this is used to limit increases in sound, especially on program change or advertising slots.
- **HP Volume** : allows you to adjust the headphones volume independently from the loud-speakers on the TV set.
- **Store:** this is used to store the sound settings.

Feature settings

❶ Press (MENU), select **Features** ((∨)) and press (>).
You can adjust:

❷ **Timer, Child Lock** and **Parental Cont.**:
see next page

❸ **Dynamic NR: Min, Med** (optimum position), **Max** or **Off:** attenuates picture noise (snow) in difficult reception conditions.

❹ **Rotation** (only available on very large screen sets): large screen sets are sensitive to terrestrial magnetic field variations.
This setting is used to compensate for this by adjusting the picture rotation.

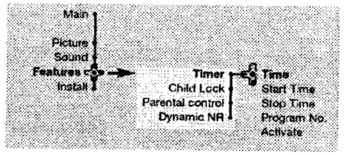
❺ To quit the menus, press (⊜).

Timer function

This menu lets you use the TV set as an alarm.

❶ Press the (MENU) key.

❷ With the cursor, select the **Features** menu then **Timer** :



❸ **Time:** enter the current time.
Note: the time is updated automatically each time the TV set is switched on via the teletext information on programme 1. If this program does not have teletext, the update will not take place.

❹ **Start Time:** enter the start time.

❺ **Stop Time:** enter the standby time.

❻ **Program No.:** enter the number of the programme for the wake-up alarm.

❼ **Activate:** the settings include:
- **Once** for a single alarm,
- **Daily** for each day,
- **Stop** to cancel.

❽ Press (⏻) to put the TV set in standby.
It will automatically come on at the time programmed. If you leave the TV set on, it will just change programmes at the time entered (and will go to standby mode at the **Stop Time**).
By combining the **TV lock** *and* **Timer** *functions, you can restrict the period during which the TV set is used, for example by your children.*

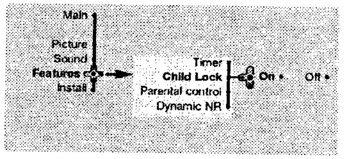
TV lock

You can block certain programs or inhibit use of the TV set completely by locking the keys.

Child lock

❶ Press (MENU).

❷ With the cursor, select the **Features** menu and position **Child Lock** to **On**.



❸ Turn off the TV set and hide the remote control. The TV set cannot be used (except via the remote control).

❹ To cancel: position **Child Lock** to **Off**.

Parental control

❶ Press the (MENU) key, select the **Features** menu then **Parental Cont.**:

❷ You must enter your secret access code.
The first time you enter this, enter code 0711 twice and then enter your new code choice.
The menu is displayed.

❸ **Parental Cont.:** Use the (∧)(∨) keys to select the TV programme required and validate with (>). The 🔒 symbol will be displayed opposite the programmes or sockets that are locked. From now on, to view a locked programme, you must enter your secret code, otherwise the screen will stay blank.
The access to the **Install** *menu is also locked.*
Caution, for encrypted programs using an external decoder, you must lock the corresponding EXT socket.

❹ **Change code:** this allows you to enter a new 4 digit code. Confirm your new code by entering it a second time.
If you have forgotten your secret code, enter the universal code 0711 twice.

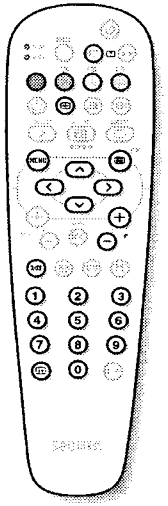
❺ **Unlock all:** this is used to unlock all locked programmes.

❻ **Lock All:** this is used to lock all the TV programmes and EXT connectors.

❼ Press the (⊜) key to quit.

Teletext

Teletext is an information system broadcast by certain channels which can be consulted like a newspaper. It also offers access to subtitles for viewers with hearing problems or who are not familiar with the transmission language (cable networks, satellite channels, etc.).

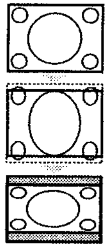


Press :		**You will obtain:**
⊜	**Teletext call**	This is used to call teletext, change to transparent mode and then exit. The summary appears with a list of items that can be accessed. Each item has a corresponding 3 digit page number. *If the channel selected does not broadcast teletext, the indication 100 will be displayed and the screen will remain blank (in this case, exit teletext and select another channel).*
⓪/⑨ ⊖P⊕ ⌃ ⌄	**Selecting a page**	Enter the number of the page required using the ⓪ to ⑨ or ⊖ **P** ⊕ keys, ⌃⌄. Example: page 120, enter ① ② ⓪. The number is displayed top left, the counter turns and then the page is displayed. Repeat this operation to view another page. *If the counter continues to search, this means that the page is not transmitted. Select another number.*
●●○●	**Direct access to the items**	Coloured areas are displayed at the bottom of the screen. The 4 coloured keys are used to access the items or corresponding pages. *The coloured areas flash when the item or the page is not yet available.*
⊞	**Contents**	This returns you to the contents page (usually page 100).
‹ ›	**Direct selection of sub-pages**	Certain pages contain sub-pages (for example, page 120 contains sub-pages 1/3, 2/3 and 3/3). If this is the case, the page number is displayed in green, preceded by the symbol ▶, ◀ or ◀ ▶. Use the keys ‹› to directly access the sub-pages of your choice.
⊕	**Enlarge a page**	This allows you to display the top or bottom part of the page and then return to normal size.
Ⓘ-Ⅱ	**Double page teletext** *(only available on certain versions)*	To activate or deactivate the double page teletext display mode. The active page is displayed on the left and the following page is displayed on the right. Press if you want to hold a page (i.e. the contents page). The active page is then displayed on the right. To return to normal mode, press Ⓘ-Ⅱ.
⊝	**Hidden information**	To display or hide the concealed information (games solutions).
MENU ⊞ ●●○●	**Favourite pages**	Instead of the standard coloured areas displayed at the bottom of the screen, you can store 4 favourite pages on the first 40 channels which can then be accessed using the coloured keys (red, green, yellow, blue). Once set, these favourite pages will become the default every time tetetext is selected. ❶ Press the MENU key to change to favourite pages mode. ❷ Display the teletext page that you want to store. ❸ Press the coloured key of your choice for 3 seconds. The page is now stored. ❹ Repeat the operation with the other coloured keys. ❺ Now when you consult teletext, your favourite pages will appear in colour at the bottom of the screen. To temporaly retrieve the standard items, press MENU. *To clear everything, and return the standard items as the default, press ⊞ for 5 seconds.*

16:9 Formats

The pictures you receive may be transmitted in 16:9 format (wide screen) or 4:3 format (conventional screen). 4:3 pictures sometimes have a black band at the top and bottom of the screen (letterbox format). This function allows you to optimise the picture display on screen.

If your television is equipped with a 4:3 screen.



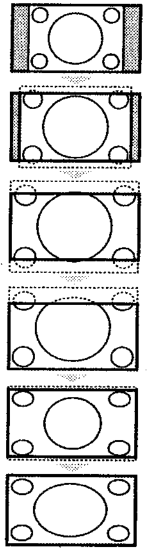
Press the ⊟ key (or ⌃⌄) to select the different modes:

4:3
The picture is reproduced in 4:3 format.

Expand 4:3
The picture is enlarged vertically. This mode is used to cancell the black bands when watching a programme in letterbox format.

Compress 16:9
The picture is compressed vertically into 16:9 format.

If your television is equipped with a 16:9 screen.



Press the ⊟ key (or ‹›) to select the different modes:
This TV set is also equipped with automatic switching which will select the correct-screen format, provided the specific signals are transmitted with the programmes.

4:3
The picture is reproduced in 4:3 format and a black band is displayed on either side of the picture. The picture may be progressively enlarged using the ⌃⌄ keys.

Zoom 14:9
The picture is enlarged to 14:9 format, a thin black band remains on both sides of the picture. The ⌃⌄ keys allow you to compress and move the image vertically to view the top or bottom of the picture (subtitles).

Zoom 16:9
The picture is enlarged to 16:9 format. This mode is recommended when displaying pictures which have black bands at the top and bottom (letterbox format).
Use the ⌃⌄ keys if you wish to compress and move the image vertically to view the top or bottom of the picture.

Subtitle Zoom
This mode is used to display 4:3 pictures using the full surface of the screen leaving the sub-titles visible.
Use the ⌃⌄ keys to increase or decrease the compression at the bottom of the screen.

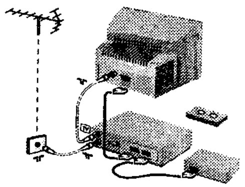
Super Wide
This mode is used to display 4:3 pictures using the full surface of the screen by enlarging the sides of the picture. The ⌃⌄ keys allow you to scroll the image up or down the screen.

Widescreen
This mode restores the correct proportions of pictures transmitted in 16:9 using full screen display.

Connecting peripheral equipment

The television has 2 external sockets situated at the back of the set (EXT1 and EXT2).
The EXT1 socket has audio, CVBS/RGB inputs and audio, CVBS outputs.
The EXT2 socket has audio, CVBS/S-VHS inputs and audio, CVBS outputs.

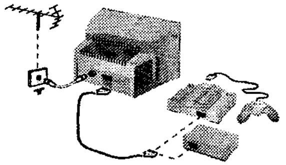
Video recorder



Carry out the connections shown opposite, using a good quality euroconnector cable.
If your video recorder does not have a euroconnector socket, the only connection possible is via the aerial cable. You will therefore need to tune in your video recorder's test signal and assign it programme number 0 (refer to manual store, p. 5).
To reproduce the video recorder picture, press ⓪.

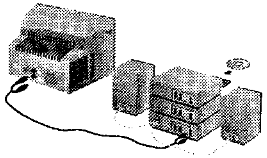
Video recorder with decoder
Connect the decoder to the second euroconnector socket of the video recorder. You will then be able to record scrambled transmissions.

Other equipment

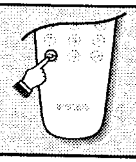


Satellite receiver, decoder, CDV, games, etc.
Carry out the connections shown opposite.
To optimise picture quality, connect the equipment which produces the RGB signals (digital decoder, games, etc.) to EXT1, and the equipment which produces the S-VHS signals (S-VHS and Hi-8 video recorders, certain DVD drives) to EXT2 and all other equipment to either EXT1 or EXT2.

Amplifier *(only available on certain versions)*



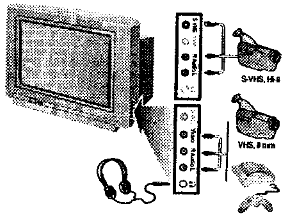
To connect to a hi-fi system, use an audio connection cable and connect the "L" and "R" outputs on the TV set to the "AUDIO IN" "L" and "R" input on your hi-fi amplifier.



To select connected equipment

Press the ⊖ key to select **EXT1, EXT2, S-VHS2** (S-VHS signals from the EXT2 socket) and **EXT3** for connections on the front panel.
Most equipment (decoder, video recorder) carries out the switching itself.

Side connections

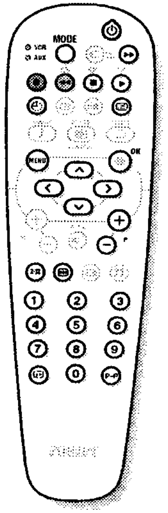


Make the connections as shown opposite.
With the ⊖ key, select **EXT3**.
For a monophonic device, connect the audio signal to the AUDIO L input. Use the Ⓘ-Ⓘ key to reproduce the sound on the left and right speakers of the TV set.

Headphones
Press the ⊗ key to mute the sound on the TV set (see also sound settings, page 6).
The headphone impedance must be between 32 and 600 Ohms.

Video recorder or DVD keys

The remote control lets you control the main functions of the VCR or DVD.



Press the **MODE** key to select the required mode : **VCR** (video recorder) or **AUX (DVD)**. The remote control indicator lights up to display the selected mode. It switches off automatically after 20 seconds if left idle.
The remote control automatically returns to TV mode.
The following keys are operational, depending on the equipment :

⏻	standby,
◄◄	fast rewind,
►►	fast forward,
●	recording,
■	stop,
►	play,
⏲	VCR timer,
▤	DVD : subtitling language
MENU	menu,
cursor	navigation and adjustments,
OK	validation,
⓪⑨	digit keys,
⊖ P ⊕	programme selection,
I-II	audio selection.
	pause,
ⓘ	OSD menu,
P↔P	DVD :T-C function / VCR : index function.

The remote control is compatible with all video recorders using the RC5 standard and all DVDs using the RC6 standard.

Tips

Poor reception
The proximity of mountains or high buildings may be responsible for ghost pictures, echoing or shadows. In this case, try manually adjusting your picture: see **Fine Tuning** (p.5) or modify the orientation of the outside aerial.
Does your antenna enable you to receive broadcasts in this frequency range (UHF or VHF band)?
In the event of difficult reception (snowy picture) switch the **Dynamic NR** on the **Features** menu to **ON**. (p. 6).

No picture
If the television does not switch on, please press the standby key ⏻ (located on the remote control) twice.
Have you connected the aerial socket properly?
Have you chosen the right system? (p. 5).
Poorly connected euroconnector cables or aerial sockets are often the cause of picture or sound problems (sometimes the connectors can become half disconnected if the TV set is moved or turned). Check all connections.

Peripheral equipment gives a black and white picture
To play a video cassette, check that it has been recorded under the same standard (PAL, SECAM, NTSC) which can be replayed by the video recorder.

The remote control no longer works.
Check that the mode selector on the side of the remote control is set to TV.

No sound
If on certain channels you receive a picture but no sound, this means that you do not have the correct TV system. Modify the **System** setting (p. 5).

Teletext
Are certain characters not displayed correctly? Check that the **Country** setting has been positioned correctly (p.5).

Remote control
The TV set does not react to the remote control; the indicator on the set no longer flashes when you use the remote control?
Replace the batteries.

Standby
When you switch the TV set on it remains in standby mode and the indication **Locked** is displayed when you use the keys on the TV set?
The **Child Lock** function is switched **On** (p. 7).
If the set receives no signal for 15 mins, it automatically goes into standby mode.
To save power, your set is fitted with components that give it a very low power consumption when in standby mode (less than 1 W).

Still no results?
If your TV set breaks down, never attempt to repair it yourself: contact your dealer's after-sales service.

Cleaning the set
Only use a clean, soft and lint-free cloth to clean the screen and the casing of your set. Do not use alcohol-based or solvent-based products.

Glossary

RGB Signals: These are 3 Red, Green and Blue video signals which directly drive the red, green and blue emitters in the cathode ray tube. Using these signals provides better picture quality.

NICAM sound: Process by which digital sound can be transmitted.

System: Television pictures are not broadcast in the same way in all countries. There are different standards: BG, DK, I, and L L'. The SYSTEM setting (p. 6) is used to select these different standards. This is not to be confused with PAL or SECAM colour coding. Pal is used in most countries in Europe, Secam in France, Russia and most African countries. The United States and Japan use a different system called NTSC.

16:9: Refers to the ration between the length and height of the screen.
Wide screen televisions have a ration of 16/9, conventional screen TV sets have a ration of 4/3.

Personal Notes:

4. Mechanical Instructions

Index of this chapter:
1. Service connector
2. Set Disassembly
3. Service Positions
4. Assy / Board Removal
5. Set Reassembly

Note: Figures below can deviate slightly from the actual situation, due to the different set executions.

4.1 Service Connector (for ComPair)

For service diagnostics with ComPair, it is not necessary to disassemble the set. You only have to connect the ComPair interface box, via the appropriate cable, to the service connector (on the rear of the set, see figure 1-2), and start the program (see also chapter 5 "Service Modes, Error Codes, and Fault Finding ").

4.2 Set Disassembly

Follow the disassemble instructions in described order.

4.2.1 Rear Cover Removal

Warning: disconnect the mains power cord before you remove the rear cover.

1. Remove all the fixation screws of the rear cover.
2. Now the rear cover can be removed.

4.3 Service Positions

This chassis has several predefined service positions, for better accessibility. They are explained below in more detail.

4.3.1 Large Signal Panel (LSP)

Component Side LSP

For better accessibility of the LSP, do the following (see Figure "Service position 1"):
1. Remove the LSP-bracket from the bottom tray by pulling it backwards.
2. Hook the bracket in the first row of fixation holes of the bottom tray. In other words, reposition the bracket from [1] to [2].

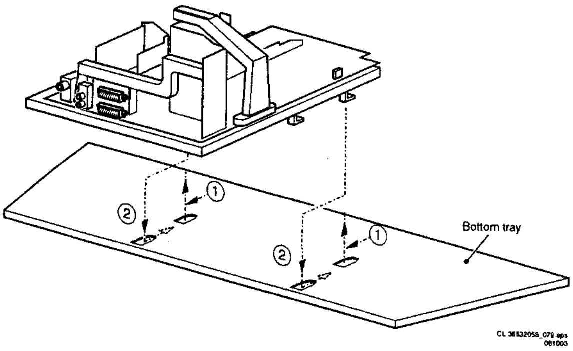


Figure 4-1 Service position 1

Solder Side LSP

To get access to the bottom side (solder side) of the LSP, do the following (see figure 4-1):
1. Remove the DAF-module (see paragraph "DAF Assy/ Panel" below).
2. Remove the Mains Switch-module (see paragraph "Mains Switch Assy/Panel" below).
3. Remove the cable from the side I/O panel.
4. Release some wiring from their fixation clamps, in order to get room for repositioning the LSP.
5. Flip the LSP 90 degrees clockwise [2], and place it in the fixation hole at the left side of the bottom tray [3].
6. Pull the LSP forward to fix it.

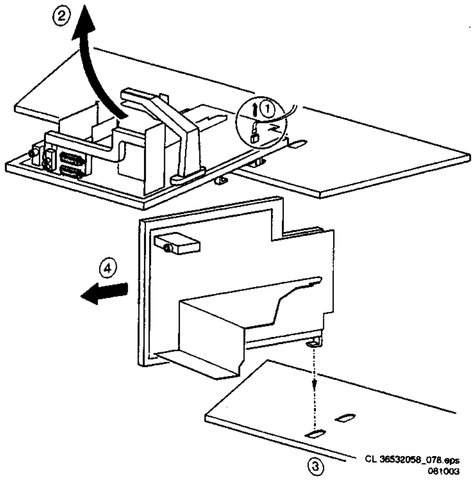


Figure 4-2 Service position 2

4.3.2 Small Signal Board (SSB)

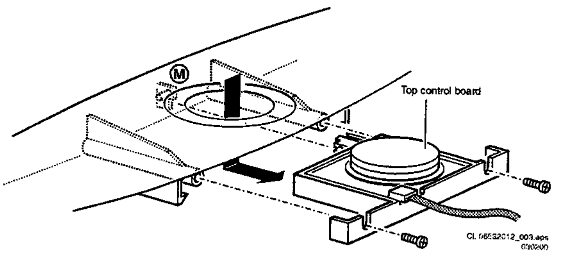
In fact, there is no predefined service position for the SSB. Most test points are located on the A-side (side that is facing the tuner). If you have to replace ICs, you must take the complete SSB module out of the SIMM-connector.

Notes:
- For better access to the SSB, it is possible to order an "extension tool" with cables. You can use this service extension tool to connect a Small Signal Board (SSB) of an a02, A10, or EMG (EMx) chassis, via two "IDE" cables to the SIMM connector in the set. In this way, you can service the SSB more easily outside the TV set. You can order this tool under 12nc: 9965 000 14526.
- If necessary for the measurement, you can put the LSP in "service position 2" (as described above).

4.4 Assy / Board Removal

Sometimes, it can be necessary to swap a complete assy or Printed Wiring Board (PWB). How that can be done is explained below.

4.4.1 Top Control Assy/Panel

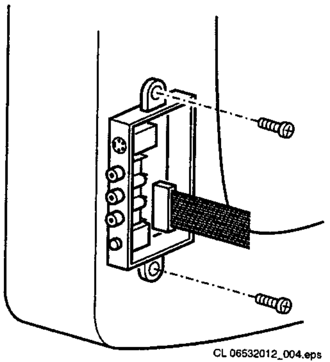


CL 06532012_003.eps
030200

Figure 4-3 Top control panel

1. Remove the two fixation screws, which hold the panel.
2. Pull the board backward (w.o.w. release it from the front hinge).
3. The board can easily be lifted out of the bracket after releasing the two fixation clamps at the connector side.

4.4.2 Side I/O Assy and Panel



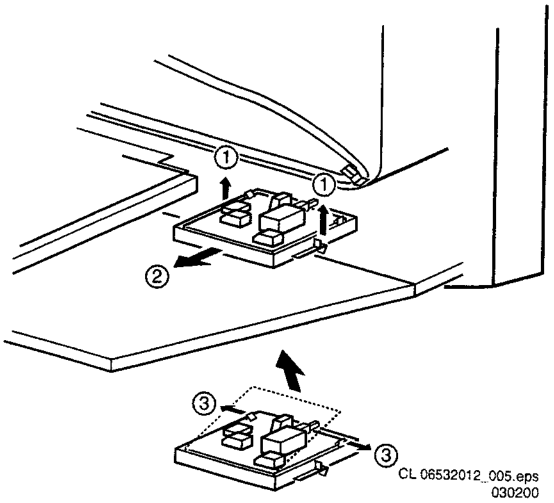
CL 06532012_004.eps
030200

Figure 4-4 Side-I/O panel

1. The complete Side I/O-assembly can easily be removed by unscrewing the two fixation screws.
2. The board can easily be lifted out of the bracket after releasing the two fixation clamps.

4.4.3 Mains Switch Assy/Panel

4.4.4 Accessing the Mains Switch/LED panel

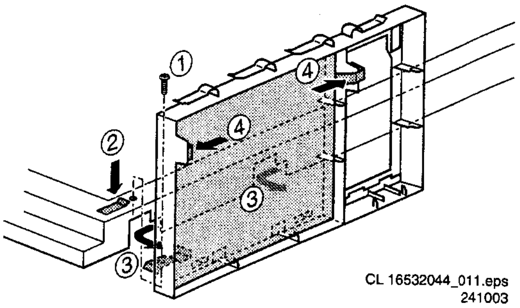


CL 06532012_005.eps
030200

Figure 4-5 Mains Switch/LED panel

1. Release the two fixation clamps (1) by pushing them upward.
2. At the same time, the complete assy must be pulled backward (2).
3. If the board has to be removed, release the two clamps at the sides of the bracket and lift panel out (3).

4.4.5 DAF Assy/Panel

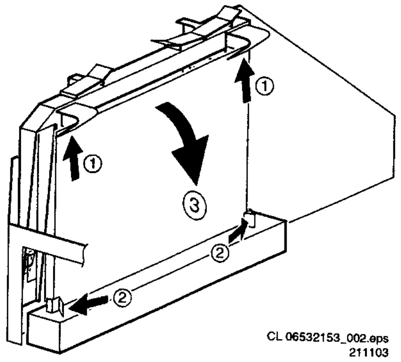


CL 16532044_011.eps
241003

Figure 4-6 DAF-module

1. Remove the fixation screw [1] (if present).
2. Push down the fixation clamp [2], and pull the complete bracket at the same time away from the CRT [3]. The module is now free from the LSP-bracket.

4.4.6 Small Signal Board (SSB)



CL 06532153_002.eps
211103

Figure 4-7 SSB removal

1. Push the top of the SSB towards the LOT [1].
2. Due to the pressure, the two metal clamps at both sides of the SIMM-connector will release [2].
3. Take the complete SSB out [3].

4.4.7 Large Signal Panel (LSP)

1. Remove the SSB (see paragraph “Small Signal Board (SSB)” above).
2. Disconnect the necessary cables.
3. Remove the fixation screw, which is located nearby the SIMM-connector.
4. Release the fixation clamps on the left of the LSP-bracket (the board hinges at the right side).
5. Remove the board from the bracket.

4.5 Set Re-assembly

To re-assemble the whole set, do all processes in reverse order.
Be sure that, before the rear cover is mounted:

- The mains cord is mounted correctly in its guiding brackets.
- All wires/cables are returned in their original positions. This is very important due to the large “hot” area of the set

5. Service Modes, Error Codes, and Fault Finding

Index of this chapter:

1. Test points
2. Service Modes
3. Problems and solving tips (related to CSM)
4. ComPair
5. Error Codes
6. The blinking LED procedure
7. Protections
8. Repair tips
9. Software downloading

5.1 Test Points

See chapter 6 " Block Diagrams, Testpoint Overview, and Waveforms".

Perform measurements under the following conditions:

- Service Default Mode.
- Video: colour bar signal.
- Audio: 3 kHz left, 1 kHz right.

5.2 Service Modes

Service Default Mode (SDM) and Service Alignment Mode (SAM) offer several features for the service technician, while the Customer Service Mode (CSM) is used for communication between a Philips Customer Care Centre (P3C) and a customer.

There is also the option of using ComPair, a hardware interface between a computer (see requirements below) and the TV chassis. It offers the ability of structured troubleshooting, test pattern generation, error code reading, software version readout, and software upgrading.
Minimum requirements: a Pentium processor, Windows 95/98, and a CD-ROM drive (see also paragraph "ComPair").

5.2.1 Service Default Mode (SDM)

Purpose

- To create a pre-defined setting, to get the same measurement results as given in this manual.
- To override SW protections (only when SDM is activated via shorting the SDM pins on the SSB).
- To start the blinking LED procedure.
- Inspection of error buffer, life timer, and software version.

Specifications

- Tuning frequency: 475.25 MHz for PAL/SECAM.
- Colour system: SECAM L for France or PAL B/G for the rest of Europe.
- All picture settings at 50 % (brightness, colour, contrast).
- All sound settings at 50 %, except volume at 25 %.
- All service-unfriendly modes (if present) are disabled, like:
  - (Sleep) timer.
  - Child/parental lock.
  - Blue mute.
  - Automatic volume limiter (AVL).
  - Auto switch-off (when no video signal was received for 10 minutes).
  - Skip/blank of non-favourite pre-sets.
  - Hotel or hospital mode.
  - Local keyboard block.
  - Smart modes.
  - Auto store of personal presets.
  - Auto user menu time-out.

How to Activate SDM

Use one of the following methods:

- Use the standard RC-transmitter and key in the code "062596", directly followed by the "MENU" button.
  Note: It is possible that, together with the SDM, the main menu will appear. To switch it "off", push the "MENU" button again.
- Short circuit, during switch "on" of the set, the two solder pads on the SSB with the indication "FOR SERVICE". These solder pads are located at the "tuner" side of the SSB (just above the large BGA IC).
  Caution: If the SDM is activated via these pins, all the software-controlled protections are de-activated for 15 s. When these 15 s are expired, the set will shutdown to protection mode.
- Use the DST-emulation feature of ComPair.
- Use the "DEFAULT" button on the Dealer Service Tool (RC7150).

After activating this mode:

- "SDM" will appear in the upper right corner of the screen.
- Also, the error buffer, operating hours, and software version are displayed (can be toggled "on/off" with the "STATUS / OSD / [i+]" button).
- Blinking LED procedure will be started.
- All software-controlled protections are overridden for 15 s. When these 15 s are expired, the set will shutdown to protection mode.

Contents of SDM:

- **HRS.** Displays the accumulated total of operation hours (not the standby hours) in hexadecimal value.
- **SW.** Displays the date of the software and the software version of the ROM
  example: A02EB1_1.00 = AAABBC-X.YY.
  - **AAA**= chassis name.
  - **BB**= region and/or function name: E= Europe, A= Asia Pacific, U= NAFTA, L= LATAM, B= Basic, T= Top, P= PAL, N= NTSC, S= Stereo, M= Mono.
  - **C**= the language cluster number.
  - **X.Y**= the software version, where X is the main version number (different numbers are not compatible with one another) and Y is the sub version number (a higher number is always compatible with a lower number).
- **ERR** (followed by maximal 8 errors). The most recent error is displayed at the upper left (for an error explanation see paragraph "Error Codes").

How to navigate

- When you press the "MENU" button on the RC transmitter, the set will toggle between the SDM and the normal user menu (with the SDM mode still active in the background).
- When you press the "STATUS / OSD / [i+]" button on the RC transmitter, the set will toggle only display "SDM". This mode is useful when performing measurements, then the OSD info will not generate interference.

How to exit SDM

Use one of the following methods:

- Switch the set to STANDBY via a standard customer RC-transmitter (the error buffer is erased).
- Via a standard customer RC-transmitter: key in "00"-sequence (the error buffer is **not** erased).

5.2.2 Service Alignment Mode (SAM)

Purpose

- To perform alignments.
- To change option settings.
- To easily identify the used software version.
- To view operation hours.
- To display / clear the error code buffer.

Specifications

- Operating hours counter.
- Software version.
- Option settings.
- Error buffer reading and erasing.
- Software alignments.
- Disable service unfriendly modes.

How to activate SAM

Use one of the following methods:

- Via a standard RC transmitter: key in the code "062596" directly followed by the "STATUS / OSD / [i+]" button.
- Use the DST-emulation feature of ComPair.
- Press the "ALIGN" button on the DST while the set is in the normal operation

After activating this mode, "SAM" will appear in the upper right corner of the screen.

Contents of SAM:

- **HRS.** Displays the accumulated total of operation hours (not the standby hours) in hexadecimal value
  Note: every time the set is switched "on" by the mains switch or the RC, the timer is increased by 0.5.
- **SW.** Displays the software version of the ROM
  example: A02EB1_1.00 = AAABBC-X.YY.
  - **AAA**= chassis name.
  - **BB**= region and/or function name: E= Europe, A= Asia Pacific, U= NAFTA, L= LATAM, B= Basic, T= Top, P= PAL, N= NTSC, S= Stereo, M= Mono.
  - **C**= the language cluster number.
  - **X.Y**= the software version, where X is the main version number (different numbers are not compatible with one another) and Y is the sub version number (a higher number is always compatible with a lower number).
- **ERR** (followed by maximal 8 errors). The most recent error is displayed at the upper left (for an error explanation see paragraph "Error Codes").
- **CLEAR ERRORS.** When you press the "OK" button, the error buffer is reset.
- **OPTIONS.** Extra features for Service.
- **AKB.** Disable (off) or enable (on) the "black current loop" (AKB= Auto Kine Bias). For Vg2 alignment.
- **VSD.** Disable (off) or enable (on) the vertical deflection (VSD= Vertical Scan Disable).**Do not use** (will cause a protection). Is for future use.
- **TUNER.** This will activate the "TUNER" alignments sub-menu.
- **WHITE TONE.** This will activate the "WHITE TONE" alignments sub-menu.
- **GEOMETRY.** This will activate the "GEOMETRY" alignments sub-menu.
- **SOUND.** This will activate the "SOUND" alignments sub-menu.
- **SMART SETTINGS.** This will activate the "SMART SETTINGS" alignments sub-menu.
- **STORE.** This will save the new settings/alignments.
- **EEPROM TEST.** This will report if the SW checksum is OK. Convenient after SW upgrading.
- **VID RAM TEST.** This will check the continuity of the address bus and data bus of the Video RAM.
- **VG2.** This feature is not implemented yet. **Do not use.**

Note: Alignments are described in chapter 8 "Alignments".

How to navigate

- In SAM, you can select the menu items with the "CURSOR UP/DOWN" key on the RC-transmitter. The selected item will be highlighted. When not all menu items fit on the screen, move the "CURSOR UP/DOWN" key to display the next/previous menu items.
- With the "CURSOR LEFT/RIGHT" keys, it is possible to:
  - (De) activate the selected menu item.
  - Change the value of the selected menu item.
  - Activate the selected submenu.
- When you press the "MENU" button on the RC transmitter, the set will toggle between the SAM and the normal user menu (with the SAM mode still active in the background).

How to exit SAM

Use one of the following methods:

- Switch the set to STANDBY via the RC-transmitter (the error buffer is erased).
- Via a standard customer RC-transmitter: key in "00"-sequence (the error buffer is **not** erased).

5.2.3 Customer Service Mode (CSM)

Purpose

When a customer is having problems with his TV-set, he can call his dealer or the Philips helpdesk (P3C). The service technician can than ask the customer to activate the CSM, in order to identify the status of the set. Now, the service technician can judge the severity of the complaint. In many cases, he can advise the customer how to solve the problem, or he can decide if it is necessary to visit the customer.
The CSM is a **read only** mode; therefore, modifications in this mode are not possible.

How to activate CSM

Use one of the following methods:

- Press the "MUTE" button on the RC-transmitter **simultaneously** with any key on the TV for at least 4 seconds.
- Key in the code "123654" via the standard RC transmitter.

Notes:

- Activation of the CSM is only possible if there is no (user) menu on the screen!
- During CSM, sound volume is set to 25% of the scale, "Smart Sound" is set to "Theatre" mode, and "Smart Picture" is set to "Rich/Movies" mode temporarily to ensure a good picture and sound of the working set. After leaving CSM, the original settings are restored.

How to navigate

By means of the "CURSOR-DOWN/UP" knob on the RC-transmitter, you can navigate through the menus.

Contents of CSM

The following information is displayed on screen:

- Text "CSM" on the first line.
- Line number for every line (to make CSM language independent).
- Option code information.
- Configuration information.
- Service-unfriendly modes.

1. **28PW8609/12** (if present). Type/model number according to the Philips standard.
2. **SOFTWARE.** Software version AAABBC-X.YY.
3. **HOURS ON.** Operating hours (in hexadecimal).
4. **CODES.** Shows the contents of the error buffer (the word "error" may not be used on this screen, instead "codes" is used).
5. **OP.** Option code information.
6. **SYSTEM.** "XXXXXX" is the (colour) system that is set for this preset (this is not applicable to NAFTA and AP-NTSC models).
7. **NO SIGNAL.** No "ident" signal present (VID status bit in MPIF) on selected source.
8. **TIMER ON** (if present). Timer (in "FEATURE" menu) is activated.
9. **CHANNEL LOCKED** (if present). Child Lock is activated (i.e. when local keyboard is locked).
10. **NOT PREFERED** (if present). Current channel is defined as skipped or non-preferred.

11. **HOTELMODE ON/OFF** (if present). Shows if the HOTEL mode is activated (only for Europe and AP).
12. **SOURCE.** Selected source before entry of CSM; XXX (channel no.), external source name (i.e. AV1, CVI, EXT1, etc...).
13. **SOUND.** Selected SOUND mode; "XX"= MONO, NICAM, STEREO, L1 (Language 1), L2 (Language 2), SAP, VIRTUAL, or DIGITAL prior entry to CSM.
14. **VOLUME.** Volume level before entry of CSM (typ. 00..100).
15. **BALANCE.** Balance level before entry of CSM (typ. -50..50).
16. **BRIGHTNESS.** Brightness level before entry of CSM (typ. 00..100).
17. **COLOR.** Colour level before entry of CSM (typ. 00..100).
18. **CONTRAST.** Contrast level before entry of CSM (typ. 00..100).
19. **HUE** (if present). Hue level before entry of CSM (typ. -50..100).

How to exit CSM

Use one of the following methods:

- After you press a key on the RC-transmitter (with exception of the "CHANNEL", "VOLUME" and digit (0-9) keys), or
- After you switch the TV-set "OFF" with the mains switch.
- After 15 min. no RC or local keyboard actions.

5.3 Problems and Solving Tips (related to CSM)

Note: Below described problems are all related to the TV settings. The procedures to change the value (or status) of the different settings are described above. New value(s) are automatically stored.

5.3.1 Picture Problems

Picture too dark

1. Press SMART PICTURE on the RC. In case the picture improves, increase the "Brightness" or the "Contrast" value. The new value(s) are automatically stored (in "personal" pre-set) for all TV channels.
2. Check in CSM lines BRIGHTNESS and/or CONTRAST. If the value of line BRIGHTNESS is low (< 10) or the value of line CONTRAST is low (< 10), increase them.

Picture too bright

1. Press SMART PICTURE on the RC. In case the picture improves, decrease the "Brightness" or the "Contrast" value. The new value(s) are automatically stored (in "personal" pre-set) for all TV channels.
2. Check in CSM lines BRIGHTNESS and/or CONTRAST. If the value of line BRIGHTNESS is high (> 40) or the value of line CONTRAST is high (> 50), decrease the "Brightness" or the "Contrast" value.

White line around picture elements and text

1. Press SMART PICTURE on the RC. In case the picture improves, decrease the "Sharpness" value. The new value is automatically stored (in "personal" pre-set) for all TV channels.
2. Check in CSM line SHARPNESS. Decrease the "Sharpness" value. The new value is automatically stored for all TV channels.

No picture

Check in CSM line 7. In case this line shows NO SIGNAL, check the aerial cable/aerial system.

Blue picture

No proper signal is received. Check the aerial cable/aerial system.

Blue picture and/or unstable picture

A scrambled or decoded signal is received.

Black and white picture

Check in CSM line COLOR. In case the value is low (< 10), increase the "Color" value. The new value is automatically stored for all TV channels.

No colours/colour lines around picture elements or colours not correct or unstable picture

1. Check in CSM line SYSTEM. If a "strange" system pops up, something has gone wrong during installation. Re-install the channel.
2. In case line SYSTEM is "FRANCE", the installed system for this pre-set is SECAM, while PAL is required. Install the required program again: open the installation menu and perform manual installation. Select system "West Europe".

Menu text not sharp enough

1. Press "SMART PICTURE". In case picture improves, decrease the "Contrast" value. The new value(s) are automatically stored for all TV channels.
2. Check in CSM line CONTRAST. If the value of this line is high (> 50), decrease the "Contrast" value.

5.3.2 Sound Problems

No sound from left and right speaker

Check in CSM line VOLUME. If the value is high, increase the value of "Volume". The new value(s) are automatically stored (in "personal" pre-set) for all TV channels.

Sound too loud for left and right speaker

Check in CSM line VOLUME. If the value is low, decrease the value of "Volume". The new value(s) are automatically stored (in "personal" pre-set) for all TV channels.

5.4 ComPair

5.4.1 Introduction

ComPair (Computer Aided Repair) is a service tool for Philips Consumer Electronics products. ComPair is a further development on the European DST (service remote control), which allows faster and more accurate diagnostics. ComPair has three big advantages:

- ComPair helps you to quickly get an understanding on how to repair the chassis in a short time by guiding you systematically through the repair procedures.
- ComPair allows very detailed diagnostics (on I^2C level) and is therefore capable of accurately indicating problem areas. You do not have to know anything about I^2C commands yourself because ComPair takes care of this.
- ComPair speeds up the repair time since it can automatically communicate with the chassis (when the microprocessor is working) and all repair information is directly available. When ComPair is installed together with the SearchMan electronic manual of the defective chassis, schematics and PWBs are only a mouse click away.

5.4.2 Specifications

ComPair consists of a Windows based faultfinding program and an interface box between PC and the (defective) product. The ComPair interface box is connected to the PC via a serial or RS232 cable.

For this chassis, the ComPair interface box and the TV communicate via a bi-directional service cable via the service connector.

The ComPair faultfinding program is able to determine the problem of the defective television. ComPair can gather diagnostic information in two ways:

- **Automatic** (by communication with the television): ComPair can automatically read out the contents of the entire error buffer. Diagnosis is done on I2C level. ComPair can access the I2C bus of the television. ComPair can send and receive I2C commands to the micro controller of the television. In this way, it is possible for ComPair to communicate (read and write) to devices on the I2C busses of the TV-set.
- **Manually** (by asking questions to you): Automatic diagnosis is only possible if the micro controller of the television is working correctly and only to a certain extends. When this is not the case, ComPair will guide you through the faultfinding tree by asking you questions (e.g. Does the screen give a picture? Click on the correct answer: YES / NO) and showing you examples (e.g. Measure test-point I7 and click on the correct oscillogram you see on the oscilloscope). You can answer by clicking on a link (e.g. text or a waveform picture) that will bring you to the next step in the faultfinding process.

By a combination of automatic diagnostics and an interactive question / answer procedure, ComPair will enable you to find most problems in a fast and effective way.

Beside fault finding, ComPair provides some **additional features** like:

- Up- or downloading of pre-sets.
- Managing of pre-set lists.
- Emulation of the Dealer Service Tool (DST).
- If both ComPair and SearchMan (Electronic Service Manual) are installed, all the schematics and the PWBs of the set are available by clicking on the appropriate hyperlink.
  Example: *Measure the DC-voltage on capacitor C2568 (Schematic/Panel) at the Mono-carrier.*
  - Click on the “Panel” hyperlink to automatically show the PWB with a highlighted capacitor C2568.
  - Click on the “Schematic” hyperlink to automatically show the position of the highlighted capacitor.
- SW upgrading

5.4.3 Stepwise Start-up

This is realised via ComPair and is very helpful when a **protection** is activated (see also chapter “Protections”). Under normal circumstances, a fault in the power supply, or an error during start-up, will switch the television to protection mode. ComPair can take over the initialisation of the television. In this way, it is possible to distinguish which part of the start-up routine (hence which circuitry) is causing the problem. Take notice that the transition between two steps can take some time, so give the set some time to reach a stable state. During the transition time, the LED can blink strangely.

On activating Service mode, protections and other errors can be trapped by powering the TV in stepwise fashion as explained below. The "stepwise start-up" mode is done in the specified sequence. Before activating this mode, all the protections are disabled and are only enabled step-by-step, to trap the errors more appropriately.

The following steps are involved.

Step 0: Standby.
- Pre-condition: The set is in protection mode.
- Post-condition: The set is switched to the stepwise start-up mode. Only the necessary Standby Supply is present, all other supplies are switched "off".

Step 1: Power "on".
- Pre-condition: All protections are disabled, sound amplifiers are muted, and general initialisation is done.
- Post-condition: 8V and 5V supplies are "on". Degaussing is "on" and switched "off" after 3 s. The supply fault protections are enabled.

Step 2: Initialised.
- Pre-condition: Step 1 is done. No supply protection faults are detected.
- Post-condition: ADOC, MPIF, and Tuner components are initialised.

Step 3: Deflection "on".
- Pre-condition: Step 2 is done. No protection faults detected.
- Post-condition: Deflection is switched "on". The horizontal deflection fault protections are enabled.

Step 4: TV "on".
- Pre-condition: Step 3 is done. No protection faults detected.
- Post-condition: Picture tube is switched "on". Sound amplifiers are demuted. The X-ray/beam current fault protections are enabled.

Note: When the set is in stepwise mode and, due to stepping-up, a protection is activated, the set will really go into protection (blinking LED). The set will not leave the stepwise-mode however. If state X is the state where the set went to protection, stepwise start-up will return to state X-1. At state (X-1) diagnostic measurements can be performed. Also, in the short time, the set is in state X but not in protection, you can also do some measurements.

5.4.4 How To Connect

1. First, install the ComPair Browser software (see the Quick Reference Card for installation instructions).
2. Connect the RS232 interface cable between a free serial (COM) port of your PC and the PC connector (marked with “PC”) of the ComPair interface.
3. Connect the mains adapter to the supply connector (marked with “POWER 9V DC”) of the ComPair interface.
4. Switch the ComPair interface “OFF”.
5. Switch the television set “OFF” with the mains switch.
6. Connect the ComPair interface cable between the connector on the rear side of the ComPair interface (marked with “I2C”) and the ComPair connector at the rear side of the TV.
7. Plug the mains adapter in a mains outlet, and switch the interface “ON”. The green and red LEDs light up together. The red LED extinguishes after approx. 1 second while the green LED remains lit.
8. Start the ComPair program and read the “Introduction” chapter.

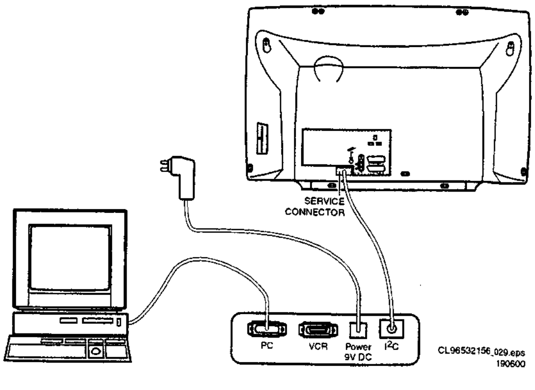


Figure 5-1 ComPair Interface connection

5.4.5 How To Order

ComPair order codes:

- Starter kit ComPair32/SearchMan32 software and ComPair interface (excl. transformer): 3122 785 90450.
- ComPair interface (excluding transformer): 4822 727 21631.
- Starter kit ComPair32 software (registration version): 3122 785 60040.
- Starter kit SearchMan32 software: 3122 785 60050.
- ComPair32 CD (2003 update): 3122 785 60110.
- SearchMan32 CD (2003 update): 3122 785 60120.
- ComPair interface cable: 3122 785 90004.
- ComPair firmware upgrade IC: 3122 785 90510.
- Transformer Europe: 4822 727 21632.
- Transformer UK: 4822 727 21633.

5.5 Error Codes

5.5.1 Introduction

The error code buffer contains all detected errors since the last time the buffer was erased. The buffer is written from left to right, new errors are logged at the left side, and all other errors shift one position to the right.
When an error has occurred, the error is added to the list of errors, provided the list is not full or the error is a protection error.
When an error occurs and the error buffer is full, then the new error is not added, and the error buffer stays intact (history is maintained), except when the error is a protection error.
To prevent that an occasional error stays in the list forever, the error is removed from the list after 50+ operation hours.
When multiple errors occur (errors occurred within a short time span), there is a high probability that there is some relation between them.

5.5.2 How to read the Error Buffer

Use one of the following methods:

- On screen via the SAM (only if you have a picture). Examples:
  - **0 0 0 0**: No errors detected
  - **6 0 0 0**: Error code 6 is the last and only detected error
  - **9 6 0 0**: Error code 6 was first detected and error code 9 is the last detected error
- Via the blinking LED procedure (when you have no picture). See next paragraph.
- Via ComPair.

5.5.3 How to clear the Error Buffer

Use **one** of the following methods:

- By activation of the “CLEAR ERRORS” command in the SAM menu.
- With a normal RC, key in sequence “MUTE” followed by “062599” and “OK”.
- When you transmit the commands “DIAGNOSE” - “99” - “OK” with ComPair (or with a DST).
- If the content of the error buffer has not changed for 50+ hours, it resets automatically.

5.5.4 Error Codes

Error codes are required to indicate failures in the TV set. In principle a unique error is available for every:

- I2C device error.
- I2C bus error (for every bus containing two or more I2C devices).
- Protection error (e.g. +8V protection or Horizontal protection).
- Error not related to an I2C device, but of importance (e.g. BC-loop, RAM error).

Table 5-1 Error Table

Error	Description
0	No error
1	Horizontal Protection (via NOHFB bit in ADOC)
3	+8V error (missing/protection active by checking MPIF ASUP bit))
4	X-ray/High beam current protection signal (via XPROT bit in ADOC)
5	Hardware Protection is active (same as EMG)
7	Under-voltage protection
11	MPIF I2C communication failure / MPIF test failed
12	BC-loop not stabilised within the time limit (i.e. after timer is expired)
13	NVM I2C communication failure
14	Main tuner I2C failure UV13xx
17	3D Combfilter I2C communication failure
18	PIP Tuner I2C failure
19	2fH component input I2C failure (PCF8574)
21	PIP IF demodulator IC TDA988x communication failed (only for PIP/DW sets)
22	Flash over protection error (to register CRT flash-overs, via FPR bit in ADOC)

Service tips:

- In case of non-intermittent faults, clear the error buffer before you begin the repair. This to ensure that old error codes are no longer present. Before clearing the buffer, write down the content, as this history can give you significant information.
- If possible, check the entire contents of the error buffer. In some situations, an error code is only the result of another error code and not the actual cause (e.g., a fault in the protection detection circuitry can also lead to a protection).

5.6 The Blinking LED Procedure

5.6.1 Introduction

Via this procedure, you can make the contents of the error buffer visible via the front LED. This is especially useful for fault finding, when there is no picture.

When the SDM is activated, the front LED will show (blink) the contents of the error-buffer. Error-codes > 10 are shown as follows:

1. A long blink of 750 ms (which is an indication of the decimal digit),
2. A pause of 1500 ms,
3. “n” short blinks (where “n” = 1 - 9),
4. When all the error-codes are displayed, the sequence finishes with a LED blink of 3000 ms,
5. The sequence starts again.

Example: Error 12 9 6 0 0.
After activation of the SDM, the front LED will show:

1. 1 long blink of 750 ms (which is an indication of the decimal digit) followed by a pause of 1500 ms,
2. 2 short blinks of 250 ms, followed by a pause of 3000 ms,
3. 9 short blinks of 250 ms, followed by a pause of 3000 ms,
4. 6 short blinks of 250 ms, followed by a pause of 3000 ms,
5. 1 long blink of 3000 ms to finish the sequence,
6. The sequence starts again.

5.6.2 How to activate

Use one of the following methods:

- Activate the SDM (only via soldering pads marked “FOR SERVICE” on the SSB). The blinking front LED will show the entire contents of the error buffer (this works in “normal operation" mode and in "protection" mode). In order to avoid confusion with RC5 signal reception blinking, this LED blinking procedure is terminated when an RC5 command is received.

- Transmit the commands "MUTE", "06250x", and "OK" with a normal RC (where "x" is the position in the error buffer that has to be displayed). With x= 1, the last detected error is shown, x= 2 the second last error, etc.... When x= 0, all errors are shown.
- "DIAGNOSE X" with the DST (where "x" is the position in the error buffer that has to be displayed). With x= 1, the last detected error is shown, x= 2 the second last error, etc.... When x= 0, all errors are shown.

Note: It can take some seconds before the blinking LED starts.

5.7 Protections

5.7.1 Introduction

Fault protections are introduced to avoid unacceptable temperature rising and burning hazards. If a fault situation is detected, an error code will be generated and if necessary, the set is put in protection mode.
The protection mode is indicated by the blinking of the front LED at a frequency of 3 Hz (or by a coded blinking in special cases). For the customer, it is made impossible to switch "on" the set during a protection.
It is possible to determine the type of fault by interpreting the blinking pattern of the LED indicator. It is also possible to read out the error codes from the NVM via ComPair. It is possible to de-activate the protection states in the Service Default Mode.

The following protections are implemented:

Table 5-2 Protections overview

Protection	Detection method	Bit name	Detection
Under Voltage	Via ADC (KB)	ADC (KB)	ADC input
+8V Supply	Via MPIF_IRQ	ASUP	MPIF internal register
Horizontal fly-back	Via interrupts	NOHFB	ADOC internal register (DOP)
X-ray	Via interrupts	XPROT	ADOC internal register (DOP)
Beam Current	Via interrupts	BCF	ADOC internal register (DOP)
Flash	Hardware ctrl	-	Hardware
Arc	Hardware ctrl	-	Hardware
Vertical	Hardware ctrl	-	Hardware
East/West	Hardware ctrl	-	Hardware
Bridge coil	Hardware ctrl	-	Hardware

The protections are split up in the following order:

- I2C related protections.
- ADOC related protections (via polling on I/O pins or via algorithms).
- DOP related protections (mainly for deflection items).
- Hardware errors that are not sensed by the OTC (e.g. vertical flyback protection, bridge coil protection, E/W protection, arcing protection).

All faults detected are re-checked five times before the protection mode is triggered. It should be noted that supply fault detection/protection are enabled only after the chassis power supply has been established. Likewise, after the line drive starts, the deflection detection/protection must be enabled. To prevent false activation of protection mode during power mode transitions, interrupts related to supply fault and deflection fault are disabled.

5.7.2 I2C Related Protections

In normal operation, some registers of the I2C controlled ICs are refreshed every 200 ms. During this sequence, the I2C busses and the I2C ICs are checked.
An I2C protection will take place if the SDA and SCL lines are short-circuited to ground, or to each other. An I2C error will also occur, if the power supply of the IC is missing.

5.7.3 ADOC Related Protections

If a protection is detected at an ADOC input, the uP will start to scan all protection inputs every 200 ms for five times. If the protection on one of the inputs is still active after 1 s, the microprocessor will put the set in the protection mode. Before the scanning is started, a so-called "ESD refresh" is carried out. This is done, because the interrupt on one of the inputs is possibly caused either by a flash or by ESD. As a flash or ESD can influence IC settings, the key ICs are initialised again, to ensure the normal picture and sound conditions of the set.

Under Voltage Protection
The under voltage protection is needed due to the non-isolated chassis architecture used in A02. Whenever there is a short circuit in the Deflection yoke coil or in the Audio power supply, the averaged Horizontal Flyback Voltage (HFB_XRAY_PROT) will fall. After signal conditioning, this voltage is fed to the "KEYBOARD_ADC" input. When this input of the MIPS controller is less than a certain level, the under voltage protection is activated. This is done by the normal keyboard polling mechanism.
The protection mode is activated after five consecutive occurrences. Response time required is 2 s. This is to avoid set going to under voltage protection mode during start up, since the HFB will only be stable w.r.t. mains on for about 1.6 s.

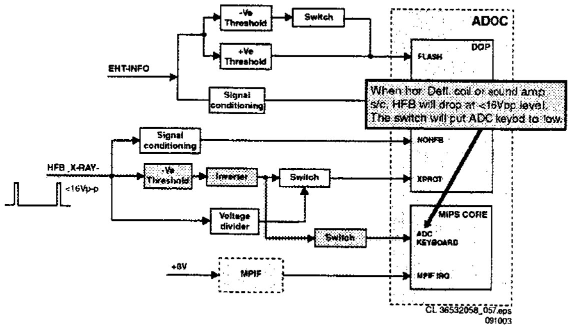
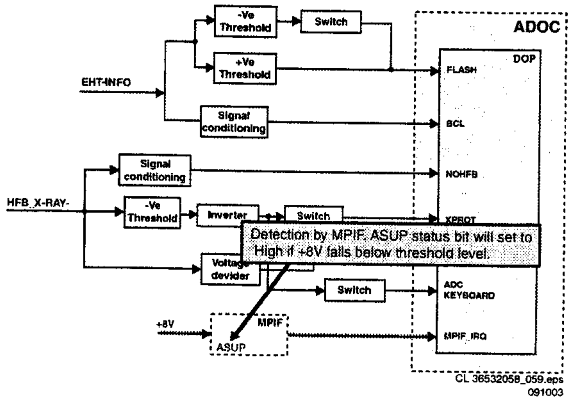


Figure 5-2 Under Voltage Protection

+8V Protection
Hardware is employed for the detection of +8V supply fault. A hardware interrupt (MPIF-IRQ) is generated by the MPIF when the +8V supply falls below the IC specification.
To avoid false detection, the corresponding interrupt sub routine checks the status of "ASUP" bit in the MPIF status register for five times consecutively with an interval of 200 ms before triggering the protection mode. Response time required is 1.2 s.


-Ve Threshold
Switch
ADOC
+Ve Threshold
DOP
EHT-INFO
FLASH
Signal conditioning
BCL
Signal conditioning
NOHFB
HFB_X-RAY-
-Ve Threshold
Inverter
Switch
XPROT
Voltage devider
Switch
ADC KEYBOARD
+8V
MPIF
ASUP
MPIF_IRQ
CL 36532058_059.eps
091003

Detection by MPIF. ASUP status bit will set to High if +8V falls below threshold level.

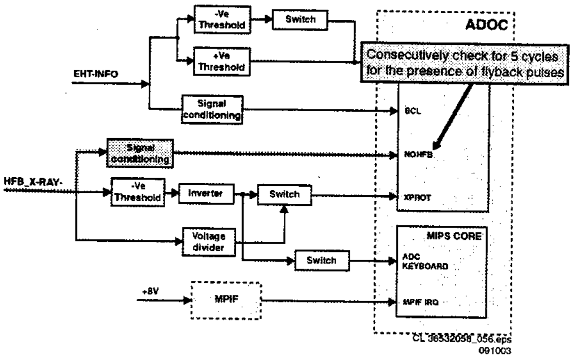
Figure 5-3 +8V Protection

5.7.4 DOP Related Protections

The uP reads every 200 ms the status register of the DOP (via the I2C bus). If a protection signal is detected on one of the inputs of the DOP, the relevant error bit in the register is set to “high”. If this error bit is still “high” after 1 s, the OTC will store the error code in the error buffer of the NVM and, depending on the relevancy of the error bit, the set will either go into the protection mode or not.

Horizontal Fly Back Protection

Hardware is employed for the detection of a horizontal deflection fault. The DOP core generates a hardware interrupt when consecutive three horizontal flyback pulses are not received at the HFB input of the DOP block of the ADOC IC. To avoid false detection, the corresponding interrupt sub routine checks the status of “NOHFB” status bit in the DOP core for five times consecutively with an interval of 50 ms before triggering the protection mode. The response time for this protection needed is 300 ms.


-Ve Threshold
Switch
ADOC
+Ve Threshold
EHT-INFO
Signal conditioning
BCL
Signal conditioning
NOHFB
HFB_X-RAY-
-Ve Threshold
Inverter
Switch
XPROT
Voltage divider
MIPS CORE
Switch
ADC KEYBOARD
+8V
MPIF
MPIF IRQ
CL 36532058_056.eps
091003

Consecutively check for 5 cycles for the presence of flyback pulses

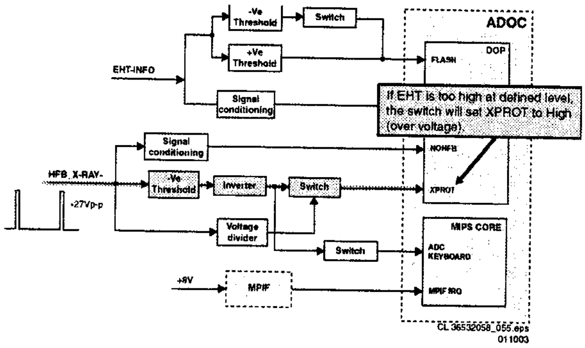
Figure 5-4 Horizontal Fly Back Protection

X-Ray Protection (Over Voltage, USA only)

Hardware is employed for the detection of X-ray fault. A hardware interrupt is generated by the DOP core when the "XPROT" input of ADOC IC is pulled "HIGH" (flyback pulses are > 27 V_pp).

To avoid false detection, the corresponding interrupt sub routine checks the status of “XPROT” bit in DOP core for five times consecutively with an interval of 50 ms before triggering the protection mode. It should be noted that the “XPROT” status is not reset on reading. It should be cleared by the software explicitly.

Once the XRAY protection status is confirmed, the “PRD” bit has to be set to "1" by software. This enables an automatic stop of the H-out via Slow Stop initiated by auto-clearing the DFL bit. Now, the protection mode is activated.

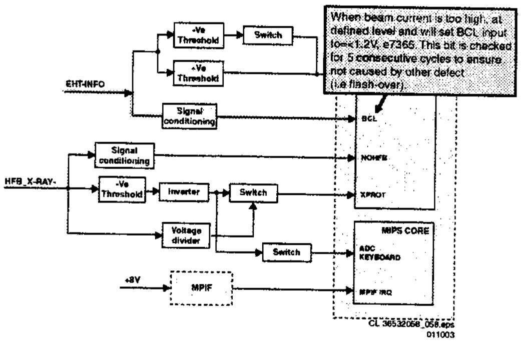

-Ve Threshold
Switch
ADOC
+Ve Threshold
DOP
EHT-INFO
FLASH
Signal conditioning
Signal conditioning
NOHFB
HFB_X-RAY-
-Ve Threshold
Inverter
Switch
XPROT
+27Vp-p
Voltage divider
MIPS CORE
Switch
ADC KEYBOARD
+8V
MPIF
MPIF IRQ
CL 36532058_055.eps
011003

If EHT is too high at defined level, the switch will set XPROT to High (over voltage).

Figure 5-5 X-Ray Protection

Beam Current Protection

A hardware interrupt is generated by the DOP core when the current at the BCL input of the ADOC IC exceeds the limit. To avoid false detection, the corresponding interrupt sub routine checks the status of “BCF” bit in DOP core for five times consecutively with an interval of 50 ms before triggering the protection mode. Once the BCL protection status is confirmed, the “PRD” bit has to be set to "1" by software. This enables an automatic stop of the H-out via Slow Stop initiated by auto-clearing the "DFL" bit. Now, the protection mode is activated.


-Ve Threshold
Switch
+Ve Threshold
EHT-INFO
Signal conditioning
BCL
Signal conditioning
NOHFB
HFB_X-RAY-
-Ve Threshold
Inverter
Switch
XPROT
Voltage divider
MIPS CORE
Switch
ADC KEYBOARD
+8V
MPIF
MPIF IRQ
CL 36532058_058.eps
011003

When beam current is too high, at defined level and will set BCL input to=<1.2V, e7365. This bit is checked for 5 consecutive cycles to ensure not caused by other defect (i.e flash-over).

Figure 5-6 Beam Current Protection

Flash Protection

Flash detection is used to shutdown the set only if the Flash occurs more than 5 times and is persistent. Therefore, this is a method to protect the set from undue electrical stress because of picture tube flashes. The flash detector circuitry uses the "EHT_INFO" signal as input. Its output is connected to the "FLASH" input of the DOP block of the ADOC.

When the "FLASH" input is pulled "HIGH", the ADOC's horizontal drive output stops immediately and the “FPR” status bit of the DOP core is set to "1". The status is latched until readout. With the absence of any other disturbances, the horizontal drive output will restart after the "FLASH" input is "LOW" again. No software interaction is required in this case. The “FPR” bit has to be readout by polling at an interval of 500 ms. If the “FPR” status bit has been set to "1" for more than 5 times consecutively, then the protection mode has to be triggered. Setting the “FPR” bit for less than 5 times by the "FLASH" input does not need to trigger the protection mode (shutting down of the H-drive should be enough).

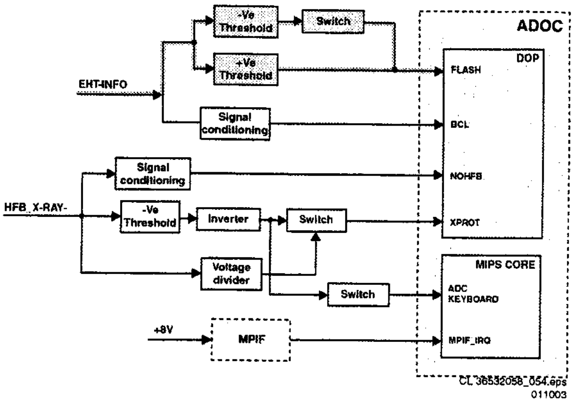


Figure 5-7 Flash Protection

5.7.5 Hardware Related Protections

Due to the architecture (read “hot” deflection), some protections cannot be sensed by the microprocessor. These protections will lead to a protection on set level (Standby mode and blinking LED).

Arc Protection
If there are “open” connections (e.g. bad solder joints) in the high-energy deflection circuitry, this can lead to damaging effects (read: fire). For that reason, the E/W current is sensed (via 3479//3480). If this current becomes too high, the “thyristor” circuit (TS7653 and TS7654) is triggered. TS7442 is switched “on” and TS7443 is forced into conduction. The “SUP-ENABLE” signal is shorted now to ground level, which will force the Main Power Supply to Standby mode. This prevents further arcing.

Vertical Protection
If the frame stage generates no pulses, TS7641 will block. TS7443 is now switched “on”, which will lead to Standby mode. Therefore, in normal operation condition, TS7641 and TS7652 are conducting, while TS7443 is blocked.

EW protection
Several faults in the defection circuit can cause excessive currents through MOSFET 7480. The temperature of this device can become too high, causing an unsafe situation. The power supply is shut down in the above-mentioned way.
Caution: All hardware deflection protections can be disabled by interrupting R3403 on the LSP.
However, be careful: unsafe situations (heat) can occur or the picture tube can be destroyed.

Bridge coil protection
According safety regulations, every coil may be short-circuited. By doing this in the secondary winding of coil L5422, high currents will flow in the winding. With no safety circuit, the coil will begin to burn soon.
This is sensed via the “EW” signal going to the base of TS7652 (via R3495 and D6499). In a normal situation, the voltage on C2498 (diagram A4) is high and TS7652 is conducting. When bridge coil 5422 (diagram A3) is short circuited, the voltage on C2498 changes to low, which will block TS7652. In this case, also TS7641 will block and the voltage on 2642 will rise until TS7443 is forced in conduction. The “SUP-ENABLE” signal (in normal operating condition -20 V) is shorted now to ground level, which will force the Main Power Supply to Standby mode.
Note: Maximum EW width settings can also cause a protection.

5.8 Repair tips

5.8.1 Miscellaneous

The relay you hear when you switch the set “on” (from Standby or via the mains switch), is from the degaussing circuitry. It is **not** used for switching the Power Supply (as done in the MG-chassis).

- Take care not to touch the “hot” heatsink while disconnecting the SSP, despite the fact that the mains cord is out of the mains socket. There still can be an annoying rest-voltage on the heatsink for a short while, because the discharge resistors 3502 and 3503 (on the LSP between hot and cold part) are not stuffed for Europe. Instead, discharge resistors 3066 and 3057 on the Mains Switch panel are used, but because they are located **before** the Mains switch, they only discharge when this switch is “on”.
  Advice: when you want to disconnect the SSP, first disconnect the Mains cord, but keep the Mains Switch in the “on” position.
- Where the circuitry was too “crowded” for service printing, you can find the correct location on the “test point overviews” in this manual.
- **A very large part of the LSP is “hot”,** such as:
  - The primary part of the Standby Supply.
  - The whole Main supply (except for the secondary Audio supply).
  - And the complete deflection circuitry (so notice that the deflection coil is hot!).

5.8.2 Start-up/Shut-down Sequence

For a detailed description, see chapter 9 " Circuit Descriptions, Abbreviation List, and IC Data Sheets".

5.8.3 ComPair

This chassis does not have an IR transmitting LED (as in MG-sets). Therefore, a “Service” (ComPair) connector is implemented at the rear side of the set, which is directly accessible. In addition to this, there is also a blinking LED procedure to show the contents of the error buffer.

When you use ComPair, you have the possibility to activate a “stepwise start-up” mode. With this mode, you can initiate the start-up sequence step by step. This also means that in certain steps, some protections are not activated. This is sometimes very convenient during repair.

5.8.4 Protections

Activating SDM via the “service pads” will overrule the processor-controlled protections, but **not** the hardware protections.
Caution: When doing this, the service technician must know what he is doing, as it could lead to damaging the set.

The “ARC”- and/or “BRIDGECOIL” protection are hardly ever triggered, however:

- When you suspect the “ARC” protection, look for bad solder joints and smell. By interrupting resistor 3497, this protection is disabled (special attention needed!).
- When you suspect the “BRIDGECOIL” protection, which can also be due to a too wide picture amplitude, shorten G and S of the E/W MOSFET 7480. This will disable the protection. You will now have minimal horizontal amplitude. Re-align the horizontal amplitude in the SAM menu and remove the G/S short of TS7480.

5.8.5 Main Supply

1. Replace FET 7504 and zener 6505.
2. Disconnect the SSP panel.
3. Short B and E of TS7529, in order to put the Main Supply in “on”-mode (TS7529 is blocking then).
   Caution: To prevent that R3403 and TS7443 will be damaged, **first disable the HW-protection of the deflection circuit.** Therefore, short-circuit C2642 on the LSP (diagram A4).
4. Attach a load of 500 Ω to the V_BAT capacitor C2515 (the supply can not work without a minimum load).
5. Use a variac, and slowly increase the V_MAINS. Measure over sensing resistors R3514//15, if a nice sawtooth voltage becomes available.
6. Also, measure the V_BAT. This may never exceed +141 V. If it does, there is something wrong in the feedback circuitry (e.g. regulator 7506).

Note: Be careful when measuring on the gate of FET TS7504. This circuitry is very high ohmic and can easily be damaged (first connect ground to measuring equipment, than measure the gate).

5.8.6 Frame Deflection

Caution: When the Frame Deflection circuitry is suspected, one must be careful. Because there is a DC-voltage on the frame deflection, **the beam current could damage the CRT neck, leading to a defective CRT.**

To prevent this from happening, you must:
1. Interrupt the resistors 3403 and 3404 on the CRT panel (diagram F), in order to remove the “filament” voltage from the tube (no beam current, so no chance of destroying the CRT).
2. Interrupt resistor 3403 on the LSP (diagram A4) to disable the “SUP-ENABLE” line.
3. Measure with a multi-meter, or better with an oscilloscope, the functionality of the Frame stage.
4. After you have found the cause, exchange the defective component (e.g. TDA8177), and re-solder the interrupted resistors.

Table 5-3 Repair tips

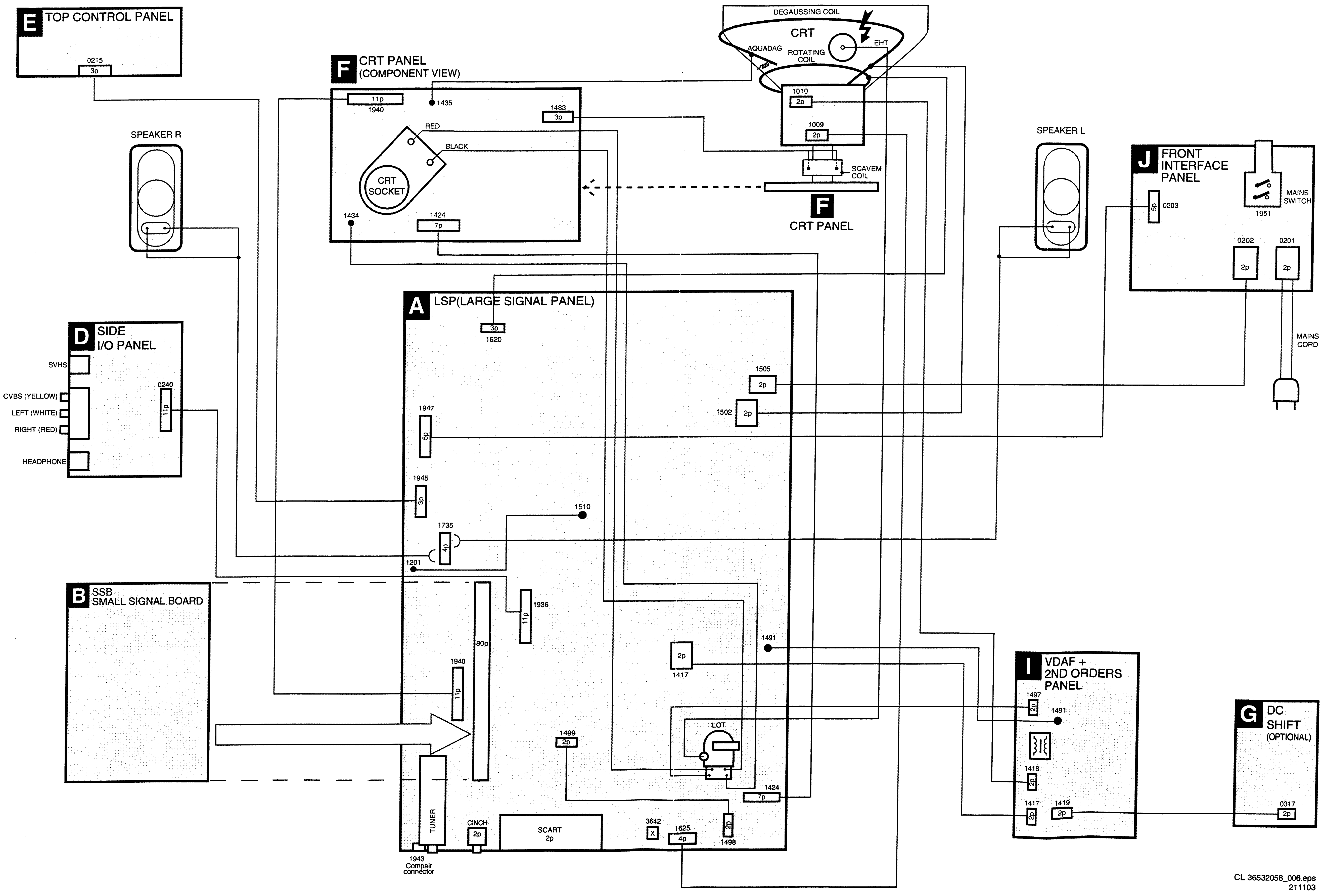
Phenomenon	Possible Cause	Repair tip
No picture, no LED.	Standby Supply defective.	Measure circuitry (see diagram A2). Start at test-point A19.When the Mains switch is "on", this voltage must always be available.
No picture, LED blinking at 3 Hz.	Set is in protection due to various causes. For error codes see error-code list.	You have no picture, so: read the error buffer via ComPair (error buffer is accessible when set is in protection, ComPair-file will guide you to this). Read the blinking LED information via standard remote command mute-06250x-ok. Or you read the error code sequence via standard remote command mute-062500-ok. When you have found the error, check the circuitry related to the supply voltage and I2C-communication or the circuitry that triggers the protection.
No picture, LED blinking with code 8-8-8-etc or 9-9-9-etc.	No communication on slow I2C- or fast I2C-bus.	As processor cannot communicate with one of the 2 busses it the standby-LED spontaneously starts blinking 8-8-8-etc or 9-9-9-etc... If in the error buffer somewhere is an error 8 or 9, these will have the highest priority starting the mentioned blinking. Measure dependent of the error on the I2C-bus which device is loading the bus (use the I2C-overview)
No picture, LED blinking with code 13-13-13-etc.	No communication on NVM-I2C bus to the uP.	As the uP cannot communicate with the NVM I2C bus, it spontaneously starts blinking 13-13-13-etc. Note: when there is no access to the NVM, a lot of picture setting can go wrong.
No picture, no sound. Set is making audible squeaking sound	Supply is possibly in hiccup-mode, which is audible via a squeaking supply transformer.	Possible causes: V_BAT is shorted (caused by short circuited line transistor 7421), the sound winding is shorted (amplifier is shorting the power supply lines), or D6514 is shorted (due to a too high V_BAT). Remove excessive load, to see what causes the failure, or check feedback circuit. See repair tip "Main Power Supply" (supply needs a minimal load).
No picture, no sound. Front LED works fine	Supply does not work correctly.	If e.g. V_BAT is only about 90 V, it is possible that the regulator IC (7506) is defective.
No RC-reception. Front LED does not echo RC-commands.	uP circuitry or RC-receiver is defective.	In case the set does react on a local keyboard operation, you must check the RC-receiver circuitry (diagram J).
Relay (degaussing) is not audible; when set is switched from "off" or "standby" to "on".	uP is not working correctly. When line "DEGAUS" is low, the degaussing must be activated.	Check RESET-circuitry (IC7581 on diagram B11). Check the level on line "DEGAUS" when you switch the set "on". Signal must be low initially and go to high after approx. 12 s.
Picture is rotated.	Rotation circuitry (if present) on diagram A5, or related supply to it, malfunctions.	Measure test points on diagram A5.
Picture is continuously switching "off" and "on", showing heavy "switch" spots (set does not go into protection).	200 V is missing on CRT panel.	Probably a bad connection from LSP connector 1424 to CRT connector 1424 (diagram F), or an interruption of the 200 V supplies line (e.g. R3341 on circuit F1 is interrupted).
Picture is not sharp.	Focus is possibly mis-aligned or SCAVEM-circuitry does not work correctly.	Re-align the "FOCUS" potmeter on the Line Output Transformer, or check the SCAVEM circuitry on the CRT-panel (diagram F). It is also possible that the DAF circuitry is defective (see diagram I). Check the V_dc values.
Picture is distorted.	Check video-path in Service Default Mode.	Investigate whether there is an error code present in the error buffer. In case there is one, check the I2C-bus and/or supply lines (see overview supply lines). Measure and check signal path Tuner-MPIF-ADOC-RGB amplifier. In case it is a geometry issue, check on diagram A4 opto-coupler 7482, OpAmps 7440/7450 and the Frame circuitry alignments or a possible corrupted NVM (IC7525 on diagram B11).
No menu, no OSD.	Probably a defective uP (ADOC).	
No Teletext.	IC7730 defective or not powered.	Check circuitry around IC7730 on diagram B13.
Strange switch "off" behaviour	TS7445 possibly defective.	Check, with a multi-meter, whether transistor TS7445 is well functioning. (diagram A3).
Various symptoms, due to missing local supply voltage.	An interrupted fuse, NFR-resistor or connection.	When no symptom or error code leads you to a specific circuitry, use the supply lines overview (see supply lines overview), for a quick scan of all supply lines.

5.9 Software Downloading

In this chassis, you can **upgrade** the software via ComPair. You can find more information on how this procedure works in the ComPair file. It is possible that not all sets are equipped with the hardware, needed to make software upgrading possible. To speed up the programming process the firmware of the ComPair interface can be upgraded. See paragraph “How To Order” for the order numbers.

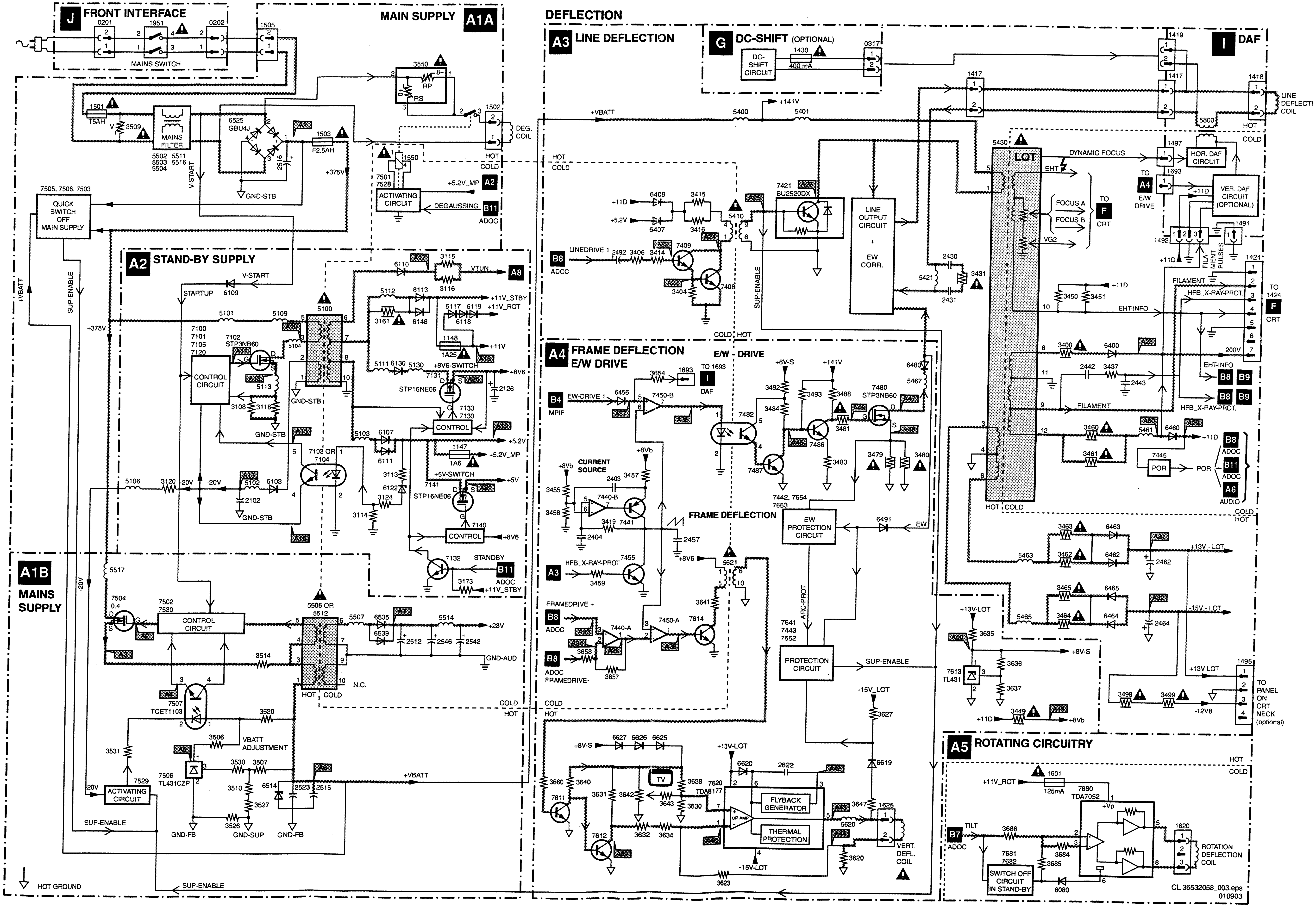
6. Block Diagrams, Testpoint Overview, and Waveforms

Wiring Diagram


E TOP CONTROL PANEL
0215
3p
F CRT PANEL (COMPONENT VIEW)
11p
1940
1435
1483
3p
RED
BLACK
CRT SOCKET
1434
1424
7p
DEGAUSSING COIL
CRT
AQUADAG
ROTATING COIL
EHT
1010
2p
1009
2p
SCAVEM COIL
F CRT PANEL
SPEAKER R
SPEAKER L
J FRONT INTERFACE PANEL
5p
0203
MAINS SWITCH
1951
0202
2p
0201
2p
MAINS CORD
A LSP(LARGE SIGNAL PANEL)
3p
1620
1505
2p
1502
2p
1947
5p
1945
3p
1510
1735
4p
1201
1936
11p
80p
1940
11p
1491
2p
1417
LOT
1499
2p
1424
7p
3642
X
1625
4p
2p
1498
TUNER
CINCH
2p
SCART
2p
1943
Compair connector
D SIDE I/O PANEL
SVHS
CVBS (YELLOW)
LEFT (WHITE)
RIGHT (RED)
HEADPHONE
0240
11p
B SSB SMALL SIGNAL BOARD
I VDAF + 2ND ORDERS PANEL
1497
2p
1491
1418
2p
1417
2p
1419
2p
G DC SHIFT (OPTIONAL)
0317
2p

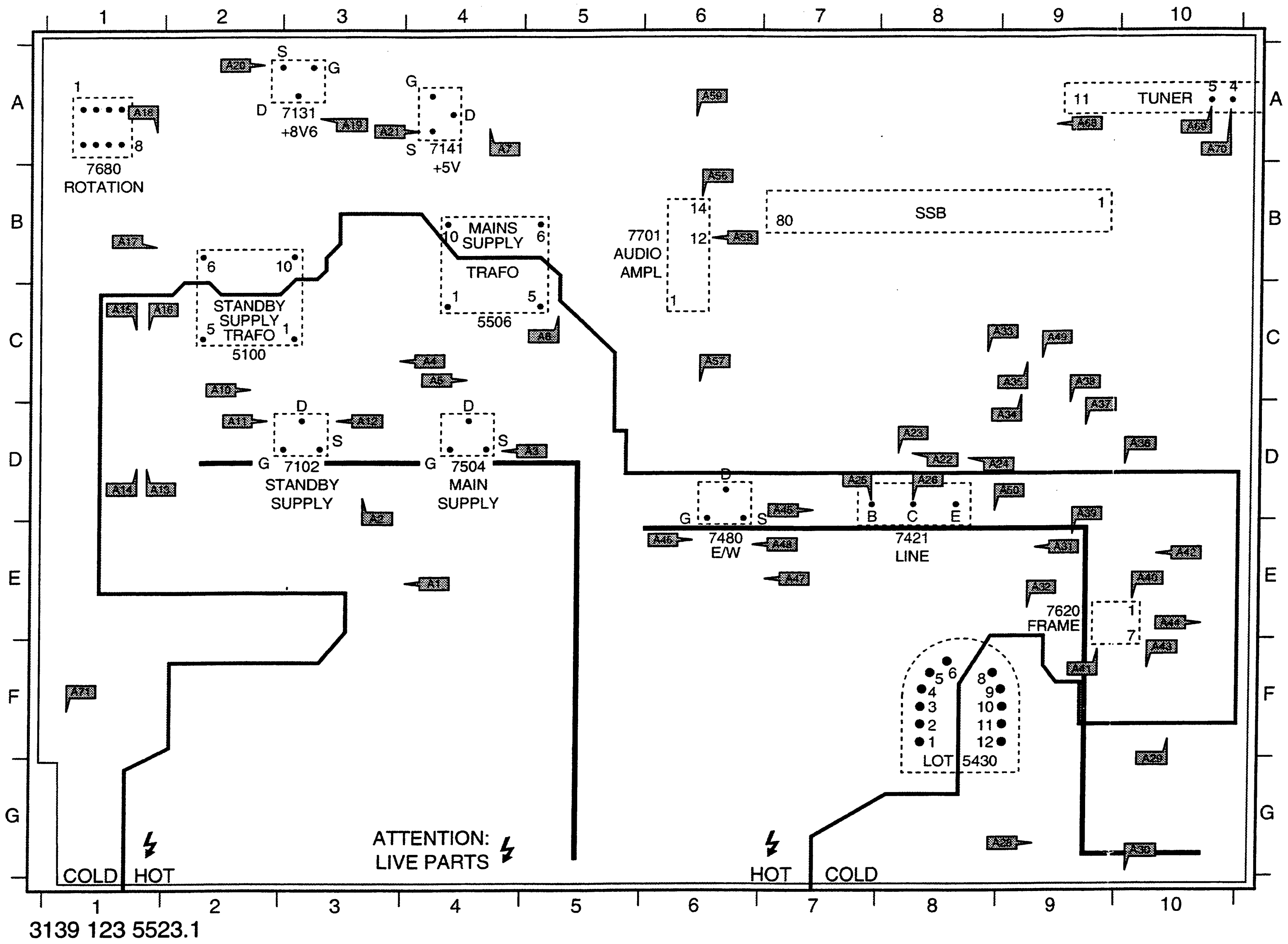
CL 36532058_006.eps
211103

Block Diagram LSP Supply and Deflection


J FRONT INTERFACE
0201
1951
0202
MAINS SWITCH
1505
MAIN SUPPLY A1A
3550
RP
RS
1502
DEG. COIL
HOT
COLD
1501
T5AH
3509
MAINS FILTER
5502 5511
5503 5516
5504
6525
GBU4J
A1
1503
F2.5AH
2516
+375V
V-START
GND-STB
1550
7501
7528
ACTIVATING CIRCUIT
+5.2V_MP A2
DEGAUSSING B11
ADOC
7505, 7506, 7503
QUICK SWITCH OFF MAIN SUPPLY
+VBATT
SUP-ENABLE
A2 STAND-BY SUPPLY
V-START
STARTUP 6109
+375V
5101
5109
5100
A10
7100
7101
7105
7120
7102
STP3NB60
A11
CONTROL CIRCUIT
A12
5113
5104
3108
3118
GND-STB
A15
6110
A17
3115
VTUN
A8
5112 6113 3116
+11V_STBY
3161 6148
6117 6119 +11V_ROT
6118
1148
1A25
+11V
A18
5111 6130 5130
+8V6-SWITCH
7131
A20
+8V6
STP16NE06
2126
7133
7130
CONTROL
A19
5103 6107
+5.2V
6111
1147
1A6
+5.2V_MP
+5V-SWITCH
+5V
7141
A21
STP16NE06
3113
6122
3124
3114
7140
CONTROL
+8V6
7103 OR 7104
5106
3120 -20V
-20V
A13
5102 6103
2102
GND-STB
A16
7132
STANDBY
B11
3173
ADOC
+11V_STBY
A1B MAINS SUPPLY
5517
-20V
7504
0.4
7502
7530
CONTROL CIRCUIT
A2
A3
5506 OR 5512
5507 6535
A7
6539
5514
+28V
2512 2546 2542
3514
GND-AUD
N.C.
HOT COLD
A4
7507
TCET1103
3520
3531
3506
VBATT ADJUSTMENT
A5
3530 3507
7506
TL431CZP
3510
6514
2523 2515
A6
+VBATT
3527
7529
ACTIVATING CIRCUIT
20V
SUP-ENABLE
3526
GND-FB
GND-SUP
GND-FB
HOT GROUND
SUP-ENABLE
COLD
HOT
DEFLECTION
A3 LINE DEFLECTION
G DC-SHIFT (OPTIONAL)
DC-SHIFT CIRCUIT
1430
400 mA
0317
+VBATT
5400
+141V
5401
HOT
COLD
6408
3415
+11D
+5.2V
6407
3416
A25
5410
7421
A26
BU2520DX
LINE OUTPUT CIRCUIT
+
EW CORR.
B8
ADOC
LINEDRIVE 1
2492 3406 3414
A22
7409
A24
A23
3404
7408
SUP-ENABLE
2430
5421
3431
2431
COLD HOT
A4 FRAME DEFLECTION E/W DRIVE
E/W - DRIVE
3654
1693
TO 1693
I
DAF
B4
MPIF
EW-DRIVE 1
6456
A37
7450-B
A36
+8V-S
+141V
3492
3493
3488
7480
STP3NB60
A47
6480
5467
3484
A46
3481
7482
A45
7486
A43
3483
7487
3479
3480
7442, 7654
7653
CURRENT SOURCE
+8Vb
2403
3457
3455
7440-B
3456
3419 7441
2404
FRAME DEFLECTION
2457
+8V6
5621
A3
HFB_X-RAY-PROT
7455
3459
3641
EW PROTECTION CIRCUIT
6491
EW
ARC-PROT
7641
7443
7652
PROTECTION CIRCUIT
SUP-ENABLE
FRAMEDRIVE +
B8
ADOC
A33
A34
7440-A
A35
7450-A
A36
7614
3658
3657
FRAMEDRIVE-
-15V_LOT
3627
6627 6626 6625
+8V-S
+13V-LOT
6620 2622
A42
6619
3660 3640
TV
3638
7620
TDA8177
7611
3631 3642
3643
3630
FLYBACK GENERATOR
THERMAL PROTECTION
OP AMP
A43
3647
1625
5620
7612
A39
3632 3634
A41
3620
VERT. DEFL. COIL
A40
3623
-15V-LOT
I DAF
1419
1417
1417
1418
LINE DEFLECTI COIL
5800
HOT
COLD
5430
LOT
DYNAMIC FOCUS
1497
HOR. DAF CIRCUIT
EHT
1693
A4
E/W DRIVE
+11D
VER. DAF CIRCUIT (OPTIONAL)
FOCUS A
FOCUS B
TO F CRT
VG2
1491
1492
FILA-MENT PULSES
+11D
1424
+11D
FILAMENT
HFB_X-RAY-PROT.
3450 3451
EHT-INFO
TO 1424 F CRT
3400 6400
A28
200V
EHT-INFO
2442 3437
2443
B8 B9
FILAMENT
HFB_X-RAY-PROT.
B8 B9
A30
3460
5461
6460
A29
+11D
B8 ADOC
3461
7445
POR
POR
B11 ADOC
A6 AUDIO
HOT COLD
COLD HOT
3463 6463
A31
+13V - LOT
5463
3462 6462
2462
3465 6465
A32
-15V - LOT
5465
3464 6464
2464
+13V-LOT
A50
3635
+8V-S
7613
TL431
3636
3637
+11D
3449
A49
+8Vb
+13V LOT
1495
3498 3499
-12V8
TO PANEL ON CRT NECK (optional)
A5 ROTATING CIRCUITRY
HOT
COLD
1601
+11V_ROT
125mA
7680
TDA7052
+Vp
B7
ADOC
TILT
3686
7681
7682
3684
3685
SWITCH OFF CIRCUIT IN STAND-BY
6080
1620
ROTATION DEFLECTION COIL
CL 36532058_003.eps
010903

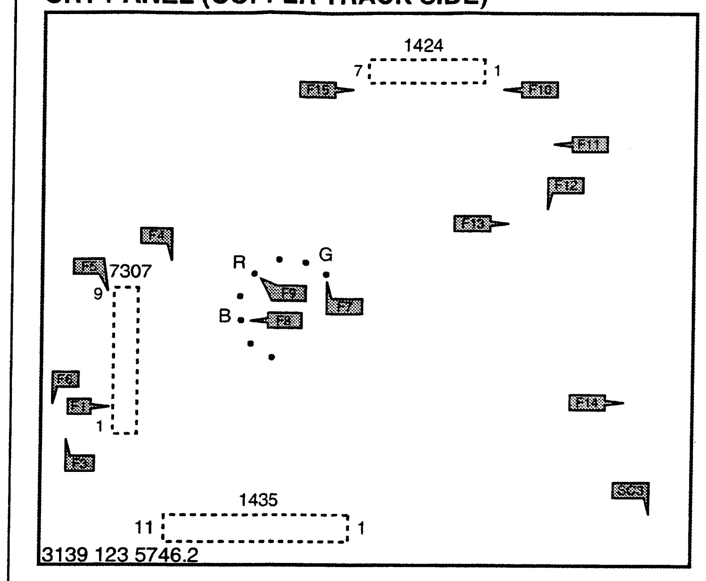
Testpoint Overview LSP and CRT

LSP COPPER TRACK SIDE

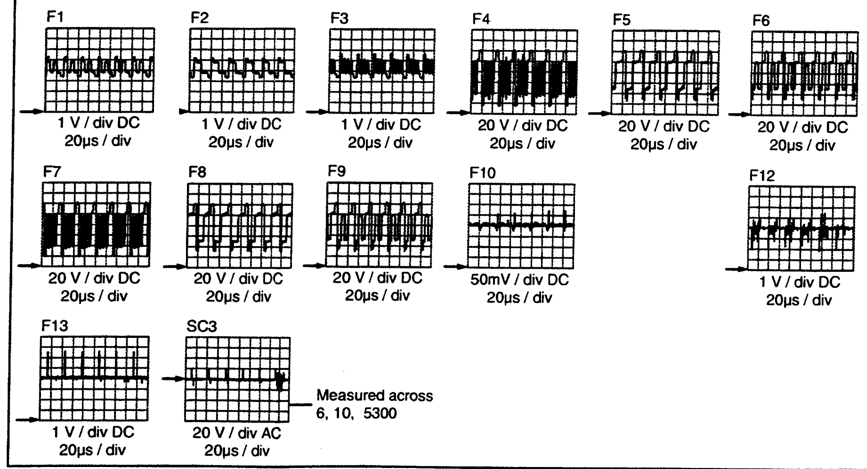

1
2
3
4
5
6
7
8
9
10
A
B
C
D
E
F
G
7680
ROTATION
7131
+8V6
7141
+5V
TUNER
11
MAINS SUPPLY
TRAFO
5506
7701
AUDIO
AMPL
SSB
80
STANDBY SUPPLY TRAFO
5100
7102
STANDBY SUPPLY
7504
MAIN SUPPLY
7480
E/W
7421
LINE
7620
FRAME
LOT 5430
ATTENTION:
LIVE PARTS
COLD
HOT
HOT
COLD
3139 123 5523.1

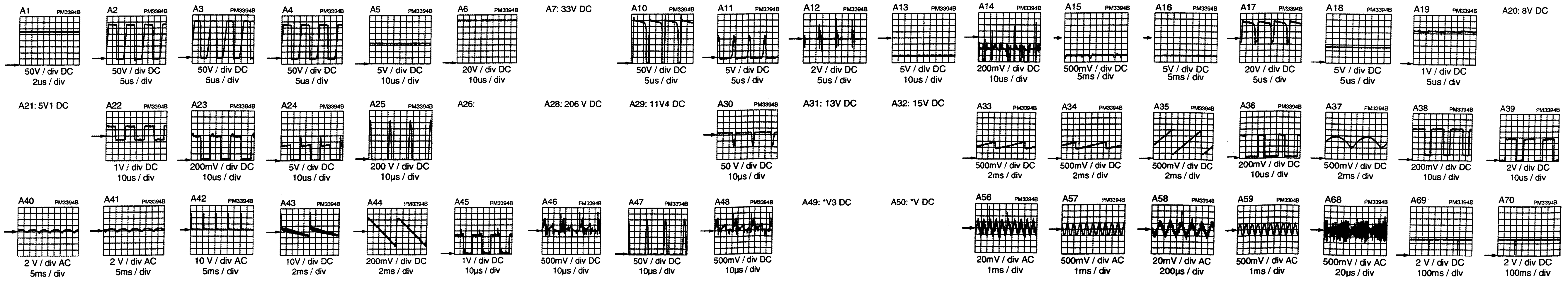
A1	E4	A58	C6
A2	D3	A59	B5
A3	D4	A68	A9
A4	C4	A69	A10
A5	C4	A70	A10
A6	C5		
A7	A4		
A10	C2		
A11	C2		
A12	D3		
A13	D1		
A14	D1		
A15	C1		
A16	C1		
A17	B1		
A18	A1		
A19	A3		
A20	A2		
A21	A3		
A22	D8		
A23	D8		
A24	D8		
A25	D8		
A26	D7		
A28	G9		
A29	G10		
A30	G10		
A31	E9		
A32	E9		
A33	C8		
A34	D9		
A35	C9		
A36	D10		
A37	D9		
A38	C9		
A39	D10		
A40	E10		
A41	E10		
A42	E10		
A43	F10		
A44	E10		
A45	D7		
A46	E6		
A47	E7		
A48	E7		
A49	C9		
A50	D9		
A56	C6		
A57	B6		

CRT PANEL (COPPER TRACK SIDE)


1424
7
1
7307
9
1
R
G
B
1435
11
1
3139 123 5746.2

F1	E4
F2	D3
F3	D4
F4	C4
F5	C4
F6	C5
F7	A4
F10	C2
F11	C2
F12	D3
F13	D1
14	D1
A15	C1
A16	C1
A17	B1
A18	A1
A19	A3
A20	A2
A21	A3
A22	D8
A23	D8
A24	D8





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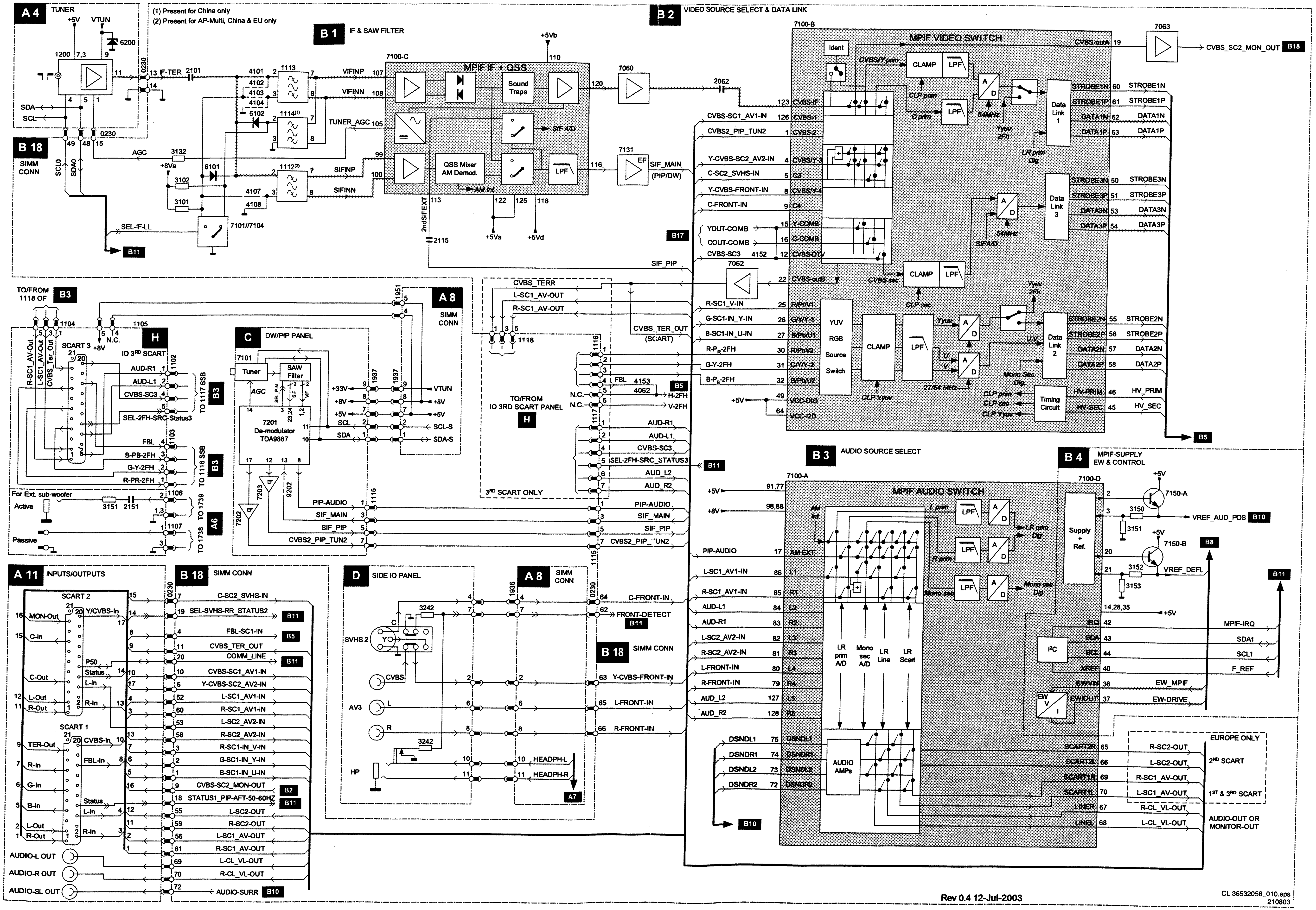
Block Diagram 1 Audio & Video


A4 TUNER
+5V VTUN
6200
1200 7,3 9
11
SDA
SCL
4 5 1
0230
13 IF-TER 2101
14
(1) Present for China only
(2) Present for AP-Multi, China & EU only
B1 IF & SAW FILTER
4101 4102 4103 4104 6102
1113
1114(1)
1112(2)
VIFINP 107
VIFINN 108
TUNER_AGC 105
SIFINP 99
SIFINN 100
7100-C
MPIF IF + QSS
Sound Traps
QSS Mixer AM Demod.
AM Int
SIF A/D
LPF
+5Vb
110
120
116
113
122 125 118
+5Va +5Vd
2ndSIFEXT
2115
7060
7131
EF
SIF_MAIN (PIP/DW)
B18 SIMM CONN
SCL0 SDA0
49 48 15
AGC 3132
+8Va
6101
3102
3101
4107
4108
SEL-IF-LL
7101//7104
B11
B2 VIDEO SOURCE SELECT & DATA LINK
7100-B
MPIF VIDEO SWITCH
Ident
CVBS/Y prim
CLAMP
LPF
CLP prim
C prim
54MHz
Yyuv 2Fh
A/D
Data Link 1
Data Link 3
Data Link 2
LR prim Dig
SIFA/D
CVBS sec
CLP sec
CLP Yyuv
YUV RGB Source Switch
27/54 MHz
Mono Sec. Dig.
CLP prim
CLP sec
CLP Yyuv
Timing Circuit
2062
123 CVBS-IF
CVBS-SC1_AV1-IN 126 CVBS-1
CVBS2_PIP_TUN2 1 CVBS-2
Y-CVBS-SC2_AV2-IN 4 CVBS/Y-3
C-SC2_SVHS-IN 5 C3
Y-CVBS-FRONT-IN 8 CVBS/Y-4
C-FRONT-IN 9 C4
YOUT-COMB 15 Y-COMB
COUT-COMB 16 C-COMB
CVBS-SC3 4152 12 CVBS-DTV
7062
22 CVBS-outB
R-SC1_V-IN 25 R/Pr/V1
G-SC1-IN_Y-IN 26 G/Y/Y-1
B-SC1-IN_U-IN 27 B/Pb/U1
R-PR-2FH 30 R/Pr/V2
G-Y-2FH 31 G/Y/Y-2
B-PB-2FH 32 B/Pb/U2
+5V 49 VCC-DIG
64 VCC-I2D
B17
SIF_PIP
CVBS-outA 19
7063
CVBS_SC2_MON_OUT B18
STROBE1N 60 STROBE1N
STROBE1P 61 STROBE1P
DATA1N 62 DATA1N
DATA1P 63 DATA1P
STROBE3N 50 STROBE3N
STROBE3P 51 STROBE3P
DATA3N 53 DATA3N
DATA3P 54 DATA3P
STROBE2N 55 STROBE2N
STROBE2P 56 STROBE2P
DATA2N 57 DATA2N
DATA2P 58 DATA2P
HV-PRIM 46 HV_PRIM
HV-SEC 45 HV_SEC
B5
TO/FROM 1118 OF B3
1104 1105
SCART 3 +8V
N.C.
H IO 3RD SCART
AUD-R1 AUD-L1 CVBS-SC3 SEL-2FH-SRC-Status3
FBL B-PB-2FH G-Y-2FH R-PR-2FH
1102 1103
TO 1117 SSB B3
TO 1116 SSB B3
R-SC1_AV-Out L-SC1_AV-Out CVBS_Ter_Out
For Ext. sub-woofer
Active 3151 2151
Passive
1106 1107
TO 1739 TO 1738 A6
C DW/PIP PANEL
7101 Tuner SAW Filter AGC
7201 De-modulator TDA9887
+33V +8V +5V SCL SDA
7202 7203 9202
PIP-AUDIO SIF_MAIN SIF_PIP CVBS2_PIP_TUN2
1937 1115
A8 SIMM CONN
1951
VTUN +8V +5V SCL-S SDA-S
CVBS_TERR L-SC1_AV-OUT R-SC1_AV-OUT
1118
TO/FROM IO 3RD SCART PANEL H
3RD SCART ONLY
CVBS_TER_OUT (SCART)
1116 1117
FBL 4153 4062
H-2FH V-2FH
N.C.
AUD-R1 AUD-L1 CVBS-SC3 SEL-2FH-SRC_STATUS3 AUD_L2 AUD_R2
PIP-AUDIO SIF_MAIN SIF_PIP CVBS2_PIP_TUN2
A11 INPUTS/OUTPUTS
SCART 2
MON-Out C-In C-Out L-Out R-Out Y/CVBS-In P50 Status L-In R-In
SCART 1
TER-Out R-In G-In B-In L-Out R-Out CVBS-In FBL-In Status L-In R-In
AUDIO-L OUT AUDIO-R OUT AUDIO-SL OUT
B18 SIMM CONN
C-SC2_SVHS-IN
SEL-SVHS-RR_STATUS2 B11
FBL-SC1-IN B5
CVBS_TER_OUT
COMM_LINE B11
CVBS-SC1_AV1-IN
Y-CVBS-SC2_AV2-IN
L-SC1_AV1-IN
R-SC1_AV1-IN
L-SC2_AV2-IN
R-SC2_AV2-IN
R-SC1-IN_V-IN
G-SC1-IN_Y-IN
B-SC1-IN_U-IN
CVBS-SC2_MON-OUT B2
STATUS1_PIP-AFT-50-60HZ B11
L-SC2-OUT
R-SC2-OUT
L-SC1_AV-OUT
R-SC1_AV-OUT
L-CL_VL-OUT
R-CL_VL-OUT
AUDIO-SURR B10
D SIDE IO PANEL
SVHS 2 3242 CVBS AV3 L R HP
A8 SIMM CONN 1936
HEADPH-L HEADPH-R A7
C-FRONT-IN
FRONT-DETECT B11
B18 SIMM CONN
Y-CVBS-FRONT-IN L-FRONT-IN R-FRONT-IN
B3 AUDIO SOURCE SELECT
7100-A
MPIF AUDIO SWITCH
+5V 91,77
+8V 98,88
AM Int
L prim R prim Mono sec
LR prim Dig
Mono sec Dig
PIP-AUDIO 17 AM EXT
L-SC1_AV1-IN 86 L1
R-SC1_AV1-IN 85 R1
AUD-L1 84 L2
AUD-R1 83 R2
L-SC2_AV2-IN 82 L3
R-SC2_AV2-IN 81 R3
L-FRONT-IN 80 L4
R-FRONT-IN 79 R4
AUD_L2 127 L5
AUD_R2 128 R5
LR prim A/D
Mono sec A/D
LR Line
LR Scart
DSNDL1 75 DSNDL1
DSNDR1 74 DSNDR1
DSNDL2 73 DSNDL2
DSNDR2 72 DSNDR2
AUDIO AMPs
B10
SCART2R 65 R-SC2-OUT
SCART2L 66 L-SC2-OUT
SCART1R 69 R-SC1_AV-OUT
SCART1L 70 L-SC1_AV-OUT
LINER 67 R-CL_VL-OUT
LINEL 68 L-CL_VL-OUT
EUROPE ONLY
2ND SCART
1ST & 3RD SCART
AUDIO-OUT OR MONITOR-OUT
B4 MPIF-SUPPLY EW & CONTROL
7100-D
Supply + Ref.
+5V 7150-A 3150 3151 VREF_AUD_POS B10
+5V 7150-B 3152 3153 VREF_DEFL B8
B11
14,28,35 +5V
I2C
IRQ 42 MPIF-IRQ
SDA 43 SDA1
SCL 44 SCL1
XREF 40 F_REF
EWVIN 36 EW_MPIF
EWIOUT 37 EW-DRIVE
EW V I
Rev 0.4 12-Jul-2003
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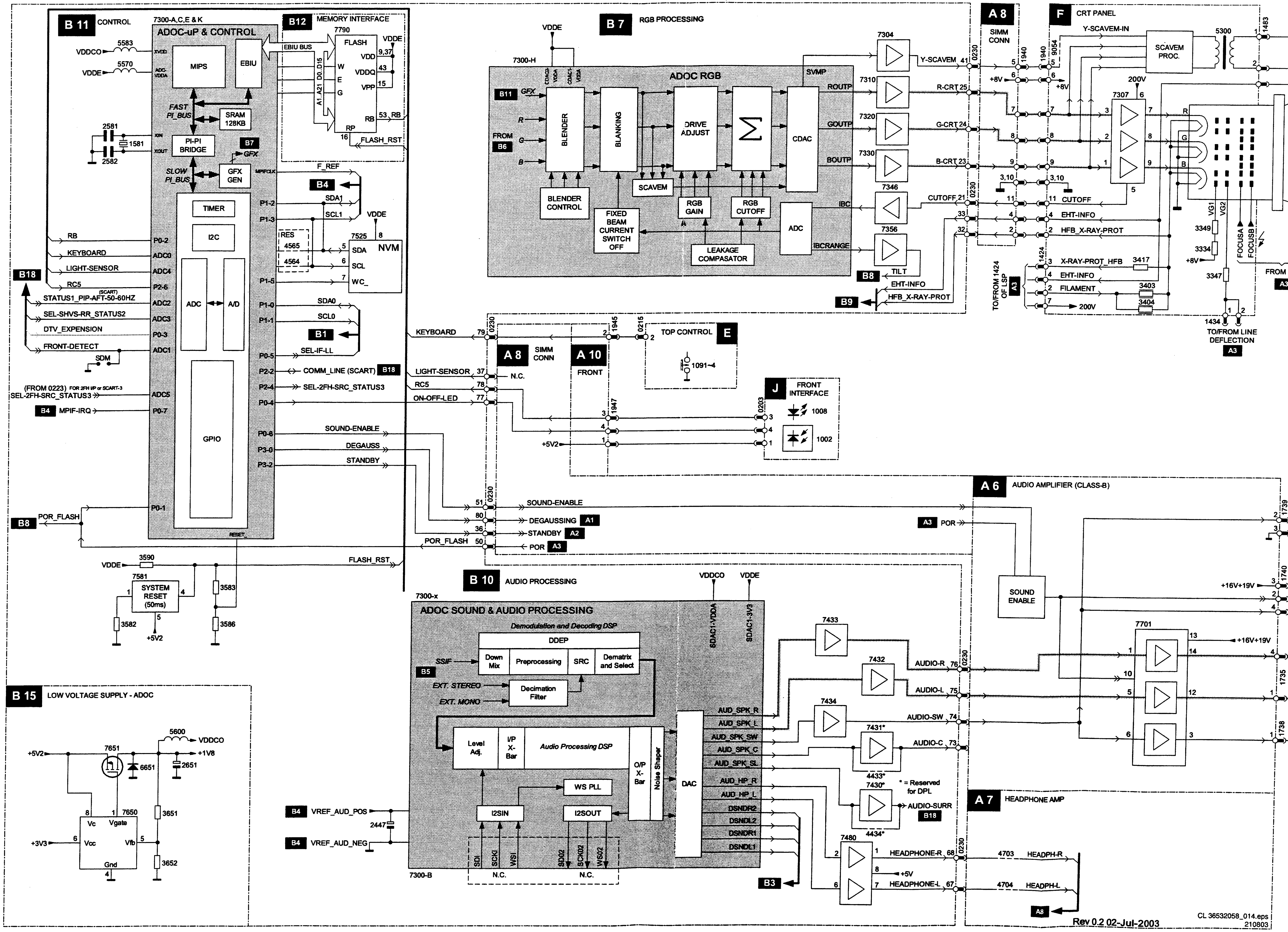
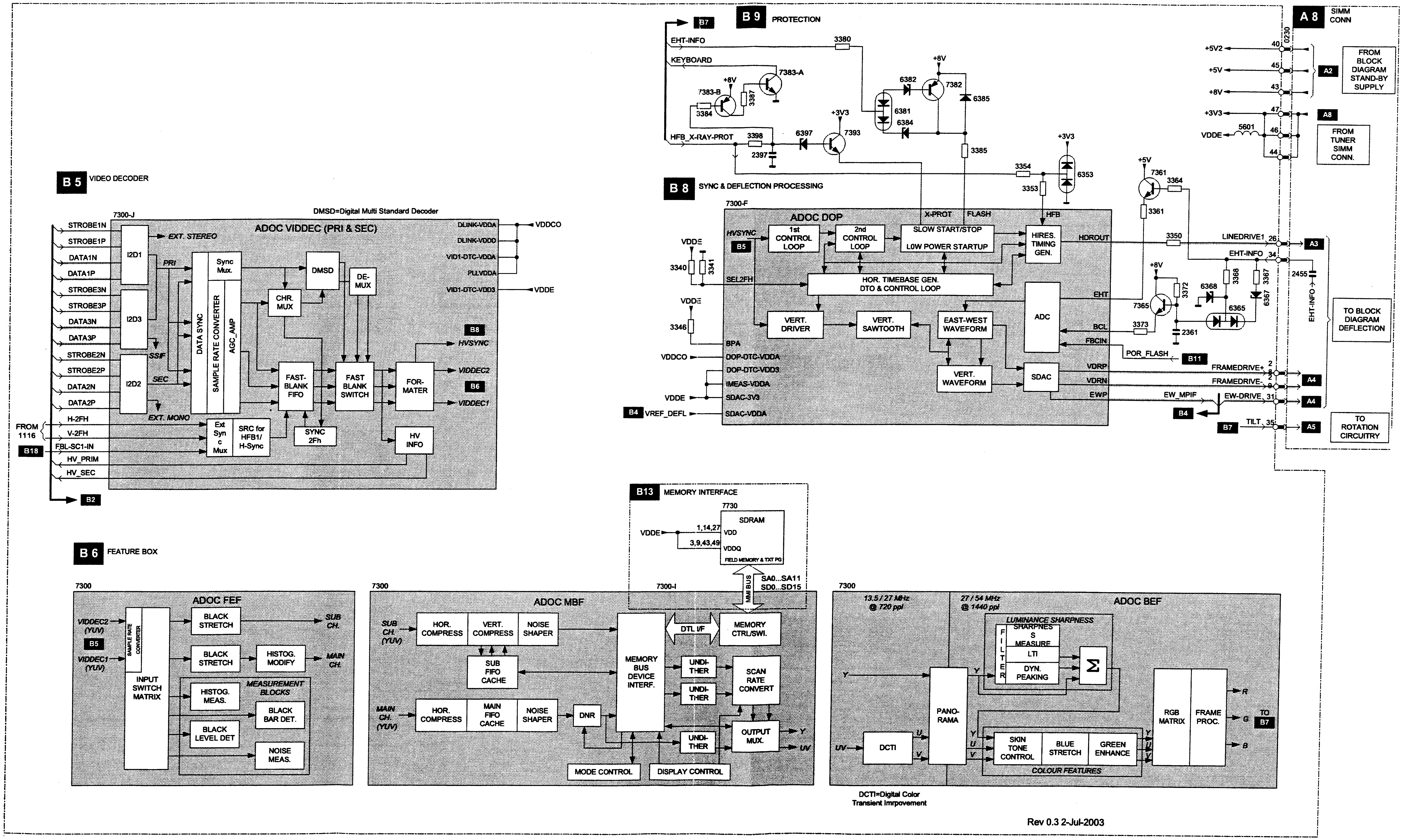
Block Diagram 2 Audio & Video


B 11 CONTROL
7300-A,C,E & K
ADOC-uP & CONTROL
VDDCO
5583
VDDE
5570
MIPS
EBIU
FAST PI_BUS
SRAM 128KB
PI-PI BRIDGE
2581
1581
2582
SLOW PI_BUS
GFX GEN
B7 GFX
TIMER
I2C
ADC
A/D
GPIO
B12 MEMORY INTERFACE
7790
FLASH
VDDE
EBIU BUS
A1..A21 D0..D15
VDD
VDDQ
VPP
W
E
G
RB
RP
FLASH_RST
F_REF
B4
SDA1
SCL1
VDDE
7525
NVM
SDA
SCL
WC_
RES
4565
4564
SDA0
SCL0
B1
SEL-IF-LL
COMM_LINE (SCART) B18
SEL-2FH-SRC_STATUS3
B18
RB
KEYBOARD
LIGHT-SENSOR
RC5
STATUS1_PIP-AFT-50-60HZ
SEL-SHVS-RR_STATUS2
DTV_EXPENSION
FRONT-DETECT
SDM
(FROM 0223) FOR 2FH I/P or SCART-3
SEL-2FH-SRC_STATUS3
B4 MPIF-IRQ
SOUND-ENABLE
DEGAUSS
STANDBY
B8 POR_FLASH
RESET_
VDDE
3590
FLASH_RST
7581
SYSTEM RESET (50ms)
3582
+5V2
3583
3586
B 7 RGB PROCESSING
VDDE
7300-H
ADOC RGB
B11 GFX
R
G
B
FROM B6
BLENDER
BLANKING
DRIVE ADJUST
Σ
CDAC
SVMP
ROUTP
GOUTP
BOUTP
IBC
IBCRANGE
ADC
BLENDER CONTROL
FIXED BEAM CURRENT SWITCH OFF
SCAVEM
RGB GAIN
RGB CUTOFF
LEAKAGE COMPASATOR
7304
7310
7320
7330
7346
7356
Y-SCAVEM
R-CRT
G-CRT
B-CRT
CUTOFF
B8 TILT
EHT-INFO
B9 HFB_X-RAY-PROT
A 8 SIMM CONN
0230
1940
9054
+8V
F CRT PANEL
Y-SCAVEM-IN
SCAVEM PROC.
5300
1483
SCAVEM COIL
200V
7307
CRT
CUTOFF
EHT-INFO
HFB_X-RAY-PROT
VG1
VG2
3349
3334
+8V
3347
FOCUSA
FOCUSB
EHT
FROM LOT A3
1424
X-RAY-PROT_HFB
3417
EHT-INFO
FILAMENT
3403
3404
200V
TO/FROM 1424 OF LSP A3
1434
TO/FROM LINE DEFLECTION A3
KEYBOARD
LIGHT-SENSOR
RC5
ON-OFF-LED
N.C.
A 8 SIMM CONN
A 10 FRONT
1945
1947
0215
TOP CONTROL E
1091-4
J FRONT INTERFACE
0203
1008
1002
+5V2
A 6 AUDIO AMPLIFIER (CLASS-B)
SOUND-ENABLE
DEGAUSSING A1
STANDBY A2
POR_FLASH
POR A3
A3 POR
SOUND ENABLE
1739
Ext. ACTIVE SUBWOOFER (via 3rd SCART Panel)
1740
Int. ACTIVE SUBWOOFER
+16V+19V
7701
+16V+19V
1735
RIGHT
LEFT
1738
Ext/Int. Passive SUB-WOOFER
B 10 AUDIO PROCESSING
VDDCO
VDDE
7300-x
ADOC SOUND & AUDIO PROCESSING
Demodulation and Decoding DSP
DDEP
SSIF
B5
Down Mix
Preprocessing
SRC
Dematrix and Select
EXT. STEREO
EXT. MONO
Decimation Filter
SDAC1-VDDA
SDAC1-3V3
Level Adj.
I/P X-Bar
Audio Processing DSP
O/P X-Bar
Noise Shaper
DAC
WS PLL
I2SIN
I2SOUT
SDI
SCKI
WSI
SDO2
SCKO2
WSO2
N.C.
7300-B
AUD_SPK_R
AUD_SPK_L
AUD_SPK_SW
AUD_SPK_C
AUD_SPK_SL
AUD_HP_R
AUD_HP_L
DSNDR2
DSNDL2
DSNDR1
DSNDL1
B3
B4 VREF_AUD_POS
2447
B4 VREF_AUD_NEG
7433
7432
7434
7431*
4433*
7430*
4434*
* = Reserved for DPL
AUDIO-R
AUDIO-L
AUDIO-SW
AUDIO-C
AUDIO-SURR B18
7480
HEADPHONE-R
+5V
HEADPHONE-L
A 7 HEADPHONE AMP
4703 HEADPH-R
4704 HEADPH-L
A8
B 15 LOW VOLTAGE SUPPLY - ADOC
+5V2
7651
6651
5600
VDDCO
+1V8
2651
7650
Vc
Vgate
+3V3
Vcc
Vfb
Gnd
3651
3652
Rev 0.2 02-Jul-2003
CL 36532058_014.eps 210803

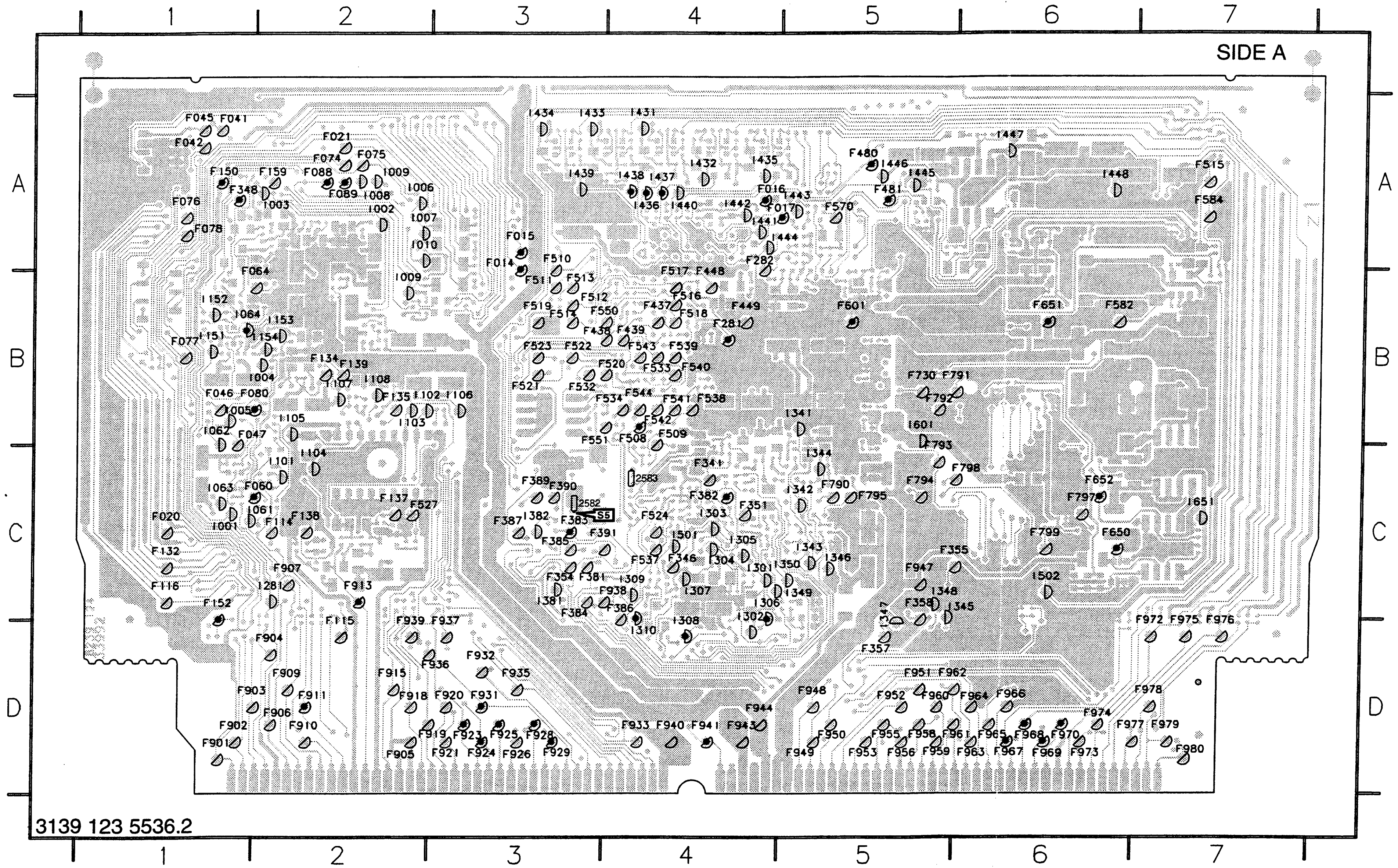
Block Diagram 3 Audio & Video


B 9 PROTECTION
B7
EHT-INFO
KEYBOARD
HFB_X-RAY-PROT
3380
3384
3387
3398
2397
6397
7383-A
7383-B
7393
6381
6382
6384
6385
7382
3385
+8V
+3V3
A 8 SIMM CONN
0230
+5V2
+5V
+8V
+3V3
VDDE
5601
A2
FROM BLOCK DIAGRAM STAND-BY SUPPLY
A8
FROM TUNER SIMM CONN.
B 5 VIDEO DECODER
7300-J
DMSD=Digital Multi Standard Decoder
ADOC VIDDEC (PRI & SEC)
STROBE1N
STROBE1P
DATA1N
DATA1P
STROBE3N
STROBE3P
DATA3N
DATA3P
STROBE2N
STROBE2P
DATA2N
DATA2P
H-2FH
V-2FH
FBL-SC1-IN
HV_PRIM
HV_SEC
FROM 1116
B18
B2
I2D1
I2D3
I2D2
EXT. STEREO
PRI
SSIF
SEC
EXT. MONO
DATA SYNC
Sync Mux.
SAMPLE RATE CONVERTER
AGC_AMP
DMSD
DE-MUX
CHR. MUX
FAST-BLANK FIFO
FAST BLANK SWITCH
FOR-MATER
Ext Sync Mux
SRC for HFB1/ H-Sync
SYNC 2Fh
HV INFO
DLINK-VDDA
DLINK-VDDD
VID1-DTC-VDDA
PLLVDDA
VID1-DTC-VDD3
VDDCO
VDDE
B8
HVSYNC
VIDDEC2
B6
VIDDEC1
B 8 SYNC & DEFLECTION PROCESSING
7300-F
ADOC DOP
HVSYNC
B5
1st CONTROL LOOP
2nd CONTROL LOOP
X-PROT
FLASH
SLOW START/STOP
LOW POWER STARTUP
HFB
HIRES. TIMING GEN.
HDROUT
SEL2FH
HOR. TIMEBASE GEN. DTO & CONTROL LOOP
VERT. DRIVER
VERT. SAWTOOTH
EAST-WEST WAVEFORM
VERT. WAVEFORM
ADC
SDAC
EHT
BCL
FBCIN
VDRP
VDRN
EWP
BPA
DOP-DTC-VDDA
DOP-DTC-VDD3
IMEAS-VDDA
SDAC-3V3
SDAC-VDDA
VDDE
3340
3341
3346
VDDCO
B4
VREF_DEFL
3353
3354
6353
+3V3
+5V
7361
3364
3361
3350
LINEDRIVE1
EHT-INFO
+8V
3372
3388
3387
6368
6367
6365
7365
3373
2361
2455
POR_FLASH
B11
FRAMEDRIVE+
FRAMEDRIVE-
EW_MPIF
EW-DRIVE
B4
B7
TILT
A3
A4
A4
A5
EHT-INFO
TO BLOCK DIAGRAM DEFLECTION
TO ROTATION CIRCUITRY
B13 MEMORY INTERFACE
7730
SDRAM
VDDE
1,14,27
3,9,43,49
VDD
VDDQ
FIELD MEMORY & TXT PG
MMI BUS
SA0...SA11
SD0...SD15
B 6 FEATURE BOX
7300
ADOC FEF
VIDDEC2 (YUV)
B5
VIDDEC1 (YUV)
SAMPLE RATE CONVERTER
INPUT SWITCH MATRIX
BLACK STRETCH
BLACK STRETCH
HISTOG. MODIFY
SUB CH.
MAIN CH.
MEASUREMENT BLOCKS
HISTOG. MEAS.
BLACK BAR DET.
BLACK LEVEL DET
NOISE MEAS.
7300
ADOC MBF
7300-I
SUB CH. (YUV)
HOR. COMPRESS
VERT. COMPRESS
NOISE SHAPER
SUB FIFO CACHE
MAIN CH. (YUV)
HOR. COMPRESS
MAIN FIFO CACHE
NOISE SHAPER
DNR
MEMORY BUS DEVICE INTERF.
DTL I/F
MEMORY CTRL/SWI.
UNDI-THER
UNDI-THER
UNDI-THER
SCAN RATE CONVERT
OUTPUT MUX.
Y
UV
MODE CONTROL
DISPLAY CONTROL
7300
ADOC BEF
13.5 / 27 MHz @ 720 ppl
27 / 54 MHz @ 1440 ppl
LUMINANCE SHARPNESS
FILTER
SHARPNESS MEASURE
LTI
DYN. PEAKING
Σ
Y
UV
DCTI
PANO-RAMA
SKIN TONE CONTROL
BLUE STRETCH
GREEN ENHANCE
COLOUR FEATURES
RGB MATRIX
FRAME PROC.
R
G
B
TO B7
DCTI=Digital Color Transient Imrpovement
Rev 0.3 2-Jul-2003

CL 36532058_013.eps
210803

Testpoint Overview SSB

1009 A2	F064 B1	F134 B2	F351 C4	F390 C3	F512 B3	F527 C2	F551 B3	F794 C5	F910 D2	F929 D3	F947 C5	F962 D5	F976 D7	I009 B2	I108 B2	I308 D4	I381 C3	I442 A4
F014 A3	F074 A2	F135 B2	F354 C3	F391 C3	F513 B3	F532 B3	F570 A5	F795 C5	F911 D2	F931 D3	F948 D5	F963 D6	F977 D6	I010 A2	I151 B1	I309 C4	I382 C3	I443 A5
F015 A3	F075 A2	F137 C2	F355 C5	F437 B4	F514 B3	F533 B4	F582 B6	F797 C6	F913 C2	F932 D3	F949 D5	F964 D6	F978 D7	I061 C2	I152 B1	I310 D4	I431 A4	I444 A5
F016 A4	F076 A1	F138 C2	F357 D5	F438 B3	F515 A7	F534 B4	F584 A7	F798 C6	F915 D2	F933 D4	F950 D5	F965 D6	F979 D7	I062 B1	I153 B2	I341 B5	I432 A4	I445 A5
F017 A4	F077 B1	F139 B2	F358 C5	F439 B4	F516 B4	F537 C4	F601 B5	F799 C6	F918 D2	F935 D3	F951 D5	F966 D6	F980 D7	I063 C1	I154 B2	I342 C5	I433 A3	I446 A5
F020 C1	F078 A1	F150 A1	F381 C3	F448 B4	F517 B4	F538 B4	F650 C6	F901 D1	F919 D3	F936 D3	F952 D5	F967 D6	I001 C1	I064 B1	I281 C2	I343 C5	I434 A3	I447 A6
F021 A2	F080 B1	F152 C1	F382 C4	F449 B4	F518 B4	F539 B4	F651 B6	F902 D1	F920 D3	F937 D3	F953 D5	F968 D6	I002 A2	I101 C2	I301 C4	I344 C5	I435 A4	I448 A6
F041 A1	F088 A2	F159 A2	F383 C3	F480 A5	F519 B3	F540 B4	F652 C6	F903 D1	F921 D3	F938 C4	F955 D5	F969 D6	I003 A2	I102 B2	I302 C4	I345 C6	I436 A4	I501 C4
F042 A1	F089 A2	F281 B4	F384 C3	F481 A5	F520 B4	F541 B4	F730 B5	F904 D2	F923 D3	F939 D2	F956 D5	F970 D6	I004 B2	I103 B2	I303 C4	I346 C5	I437 A4	I502 C6
F045 A1	F114 C2	F282 A4	F385 C3	F508 B4	F521 B3	F542 B4	F790 C5	F905 D2	F924 D3	F940 D4	F958 D5	F972 D7	I005 B1	I104 C2	I304 C4	I347 C5	I438 A4	I601 B5
F046 B1	F115 D2	F341 C4	F386 C4	F509 B4	F522 B3	F543 B4	F791 B5	F906 D2	F925 D3	F941 D4	F959 D5	F973 D6	I006 A2	I105 B2	I305 C4	I348 C5	I439 A3	I651 C7
F047 B1	F116 C1	F346 C4	F387 C3	F510 A3	F523 B3	F544 B4	F792 B5	F907 C2	F926 D3	F943 D4	F960 D5	F974 D6	I007 A2	I106 B3	I306 C4	I349 C5	I440 A4	
F060 C2	F132 C1	F348 A1	F389 C3	F511 B3	F524 C4	F550 B3	F793 C5	F909 D2	F928 D3	F944 D4	F961 D6	F975 D7	I008 A2	I107 B2	I307 C4	I350 C5	I441 A4	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A
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SIDE A
F045
F041
F042
F021
F074
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F088
F089
1009
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1002
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F150
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1103
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F080
1005
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F047
1104
1101
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F060
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F114
F138
1001
F020
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F913
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F341
2583
F389
F390
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F387
1382
F383
S5
F385
F391
F382
F351
1303
F524
1501
F537
F346
1304
1305
F354
F381
1309
1381
F384
F938
1386
1310
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1301
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F790
F795
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F570
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F515
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F651
F582
F730
F791
F792
1601
F793
F798
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F652
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1651
F799
F650
F355
F947
1348
F358
1345
1347
1502
F357
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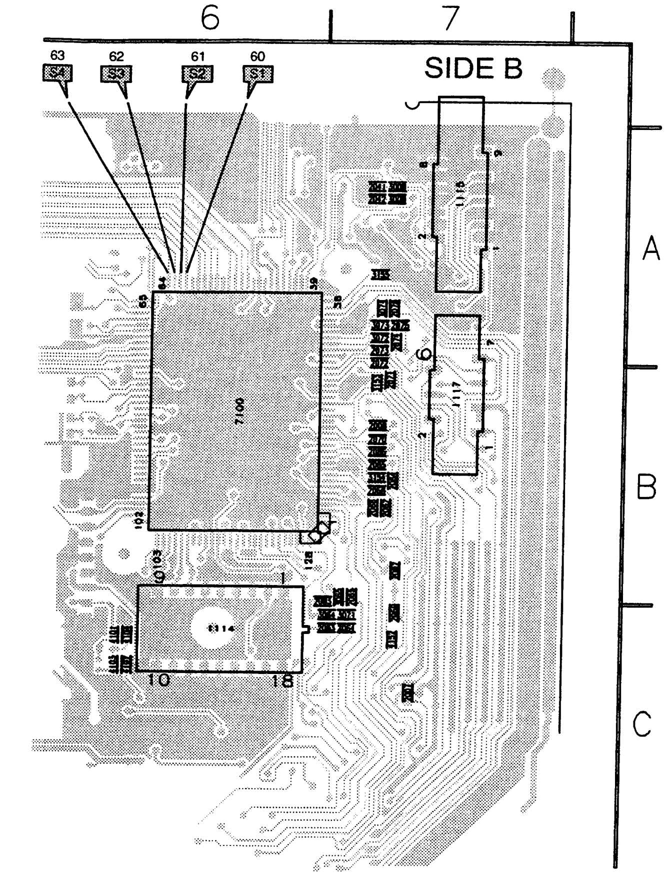
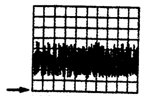
F973
F980
3139 123 5536.2

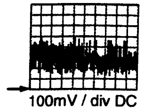

6
7
63
62
61
60
S4
S3
S2
S1
SIDE B
A
B
C
7100
10
18
1

S1



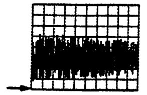
100mV / div DC
20µs / div

S2



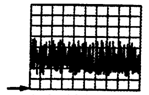
100mV / div DC
20µs / div

S3



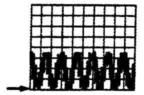
100mV / div DC
20µs / div

S4



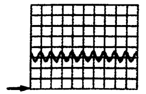
100mV / div DC
20µs / div

S5



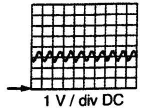
500mV / div DC
50ns / div

F014



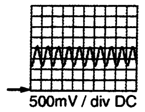
1 V / div DC
1ms / div

F015



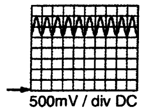
1 V / div DC
1ms / div

F016



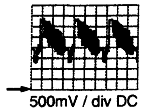
500mV / div DC
1ms / div

F017



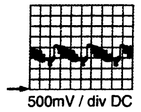
500mV / div DC
1ms / div

F060



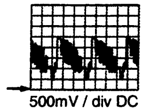
500mV / div DC
20µs / div

F080



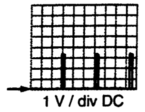
500mV / div DC
20µs / div

F064



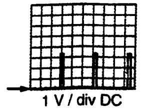
500mV / div DC
20µs / div

F088



1 V / div DC
20µs / div

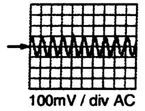
F089



1 V / div DC
20µs / div

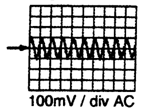
F150: 3V2 DC
F152: 3V2 DC
F281: 3V2 DC
F381: 0V DC
F382: 0V DC
F383: 0V DC

F480



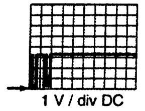
100mV / div AC
1ms / div

F481



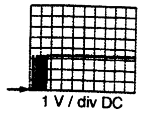
100mV / div AC
1ms / div

F508



1 V / div DC
500µs / div

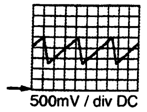
F509



1 V / div DC
200µs / div

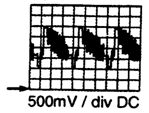
F601: 1V8 DC
F650: 3V2 DC
F651: 1V8 DC

F652



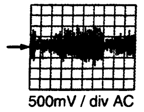
500mV / div DC
500ns / div

F911



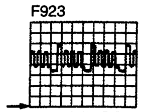
500mV / div DC
20µs / div

F913



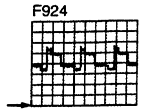
500mV / div AC
10µs / div

F923



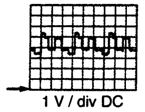
1 V / div DC
10µs / div

F924



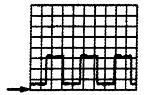
1 V / div DC
10µs / div

F925



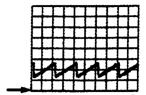
1 V / div DC
10µs / div

F926



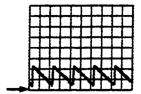
1 V / div DC
10µs / div

F928



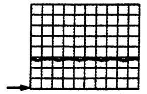
500mV / div DC
5ms / div

F929



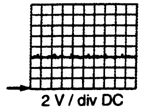
500mV / div DC
5ms / div

F931



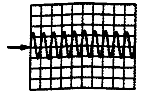
1 V / div DC
5ms / div

F941



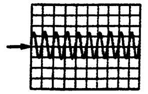
2 V / div DC
20µs / div

F967



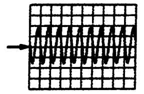
200mV / div AC
1ms / div

F968



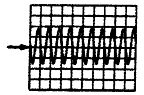
200mV / div AC
1ms / div

F969



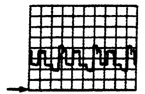
500mV / div AC
1ms / div

F970



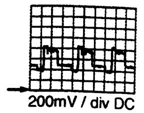
500mV / div AC
1ms / div

I306



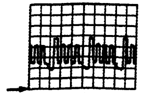
200mV / div DC
10µs / div

I308



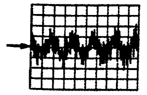
200mV / div DC
10µs / div

I310



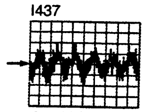
200mV / div DC
10µs / div

I436



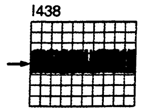
20mV / div AC
500µs / div

I437



20mV / div AC
200µs / div

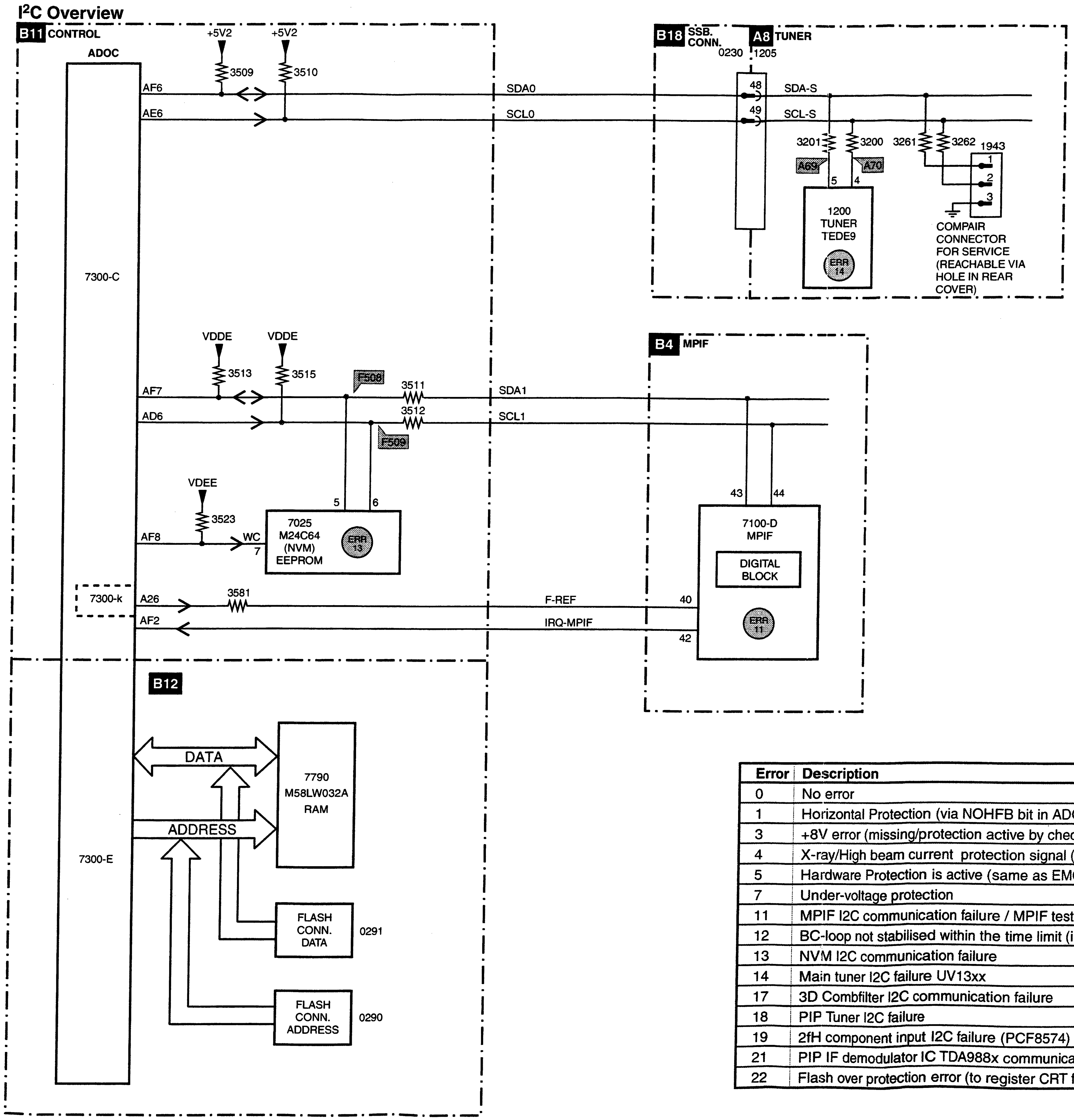
I438



100mV / div AC
1ms / div

CL 36532058_008.eps
211103

I2C Overview


I²C Overview
B11 CONTROL
ADOC
+5V2
+5V2
3509
3510
AF6
AE6
SDA0
SCL0
7300-C
VDDE
VDDE
3513
3515
F508
3511
3512
F509
AF7
AD6
SDA1
SCL1
VDEE
3523
AF8
WC
7
5
6
7025
M24C64
(NVM)
EEPROM
ERR 13
7300-k
A26
AF2
3581
F-REF
IRQ-MPIF
B12
DATA
ADDRESS
7790
M58LW032A
RAM
7300-E
FLASH
CONN.
DATA
0291
FLASH
CONN.
ADDRESS
0290
B18 SSB. CONN.
A8 TUNER
0230
1205
48
49
SDA-S
SCL-S
3201
3200
3261
3262
1943
A69
A70
5
4
1
2
3
1200
TUNER
TEDE9
ERR 14
COMPAIR CONNECTOR FOR SERVICE (REACHABLE VIA HOLE IN REAR COVER)
B4 MPIF
43
44
7100-D
MPIF
DIGITAL BLOCK
ERR 11
40
42

Error	Description
0	No error
1	Horizontal Protection (via NOHFB bit in ADOC)
3	+8V error (missing/protection active by checking MPIF ASUP bit))
4	X-ray/High beam current protection signal (via XPROT bit in ADOC)
5	Hardware Protection is active (same as EMG)
7	Under-voltage protection
11	MPIF I2C communication failure / MPIF test failed
12	BC-loop not stabilised within the time limit (i.e. after timer is expired)
13	NVM I2C communication failure
14	Main tuner I2C failure UV13xx
17	3D Combfilter I2C communication failure
18	PIP Tuner I2C failure
19	2fH component input I2C failure (PCF8574)
21	PIP IF demodulator IC TDA988x communication failed (only for PIP/DW Sets)
22	Flash over protection error (to register CRT flash-overs, via FPR bit in ADOC)

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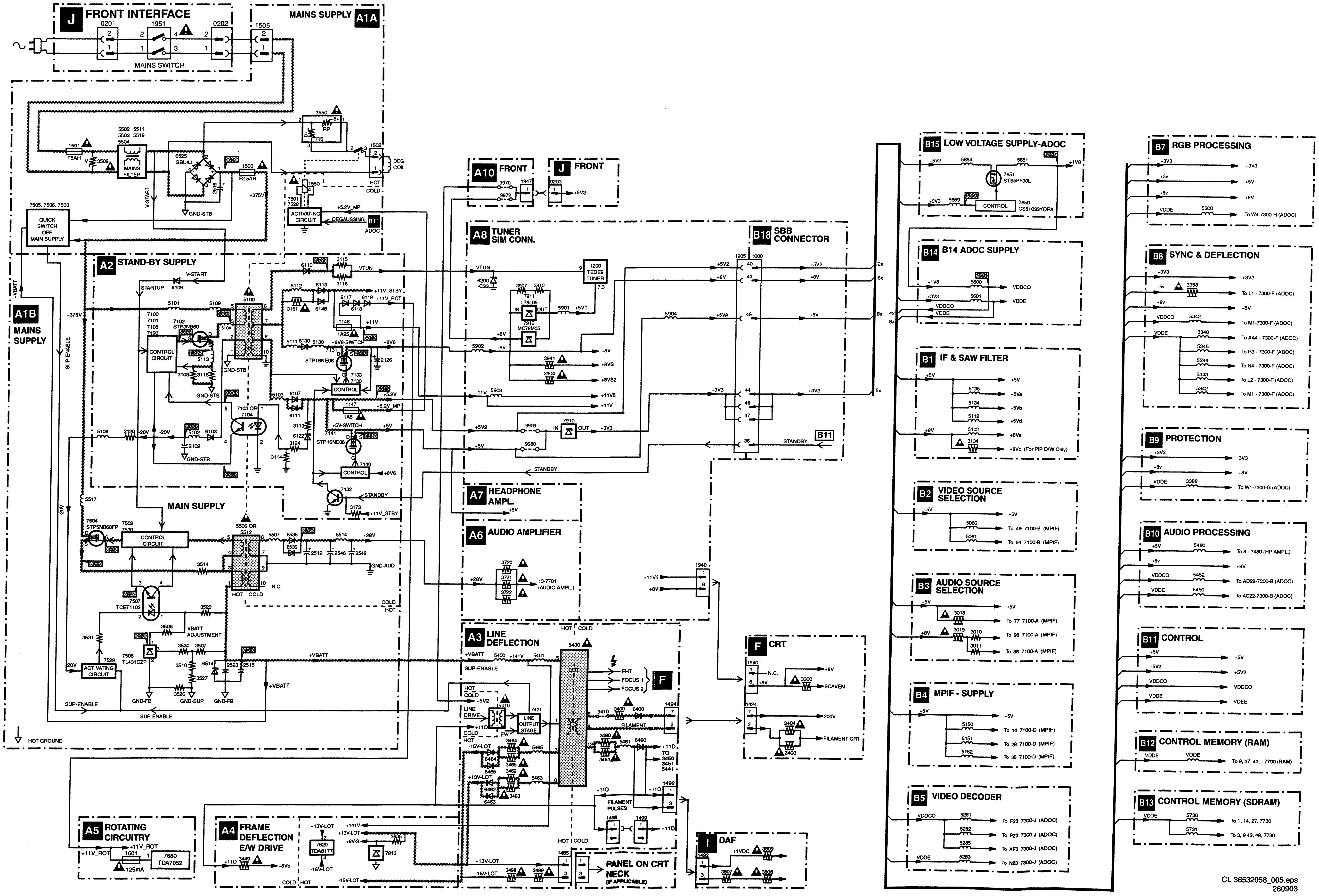
030903

Supply Lines Overview


J FRONT INTERFACE
MAINS SWITCH
MAINS SUPPLY A1A
A1B MAINS SUPPLY
A2 STAND-BY SUPPLY
MAIN SUPPLY
QUICK SWITCH OFF MAIN SUPPLY
CONTROL CIRCUIT
ACTIVATING CIRCUIT
DEGAUSSING
DEG. COIL
HOT GROUND
A10 FRONT
J FRONT
A8 TUNER SIM CONN.
B18 SBB CONNECTOR
A7 HEADPHONE AMPL.
A6 AUDIO AMPLIFIER
A3 LINE DEFLECTION
LOT
EHT
FOCUS 1
FOCUS 2
FILAMENT
FILAMENT PULSES
A5 ROTATING CIRCUITRY
A4 FRAME DEFLECTION E/W DRIVE
PANEL ON CRT NECK (IF APPLICABLE)
F CRT
I DAF
B15 LOW VOLTAGE SUPPLY-ADOC
B14 B14 ADOC SUPPLY
B1 IF & SAW FILTER
B2 VIDEO SOURCE SELECTION
B3 AUDIO SOURCE SELECTION
B4 MPIF - SUPPLY
B5 VIDEO DECODER
B7 RGB PROCESSING
B8 SYNC & DEFLECTION
B9 PROTECTION
B10 AUDIO PROCESSING
B11 CONTROL
B12 CONTROL MEMORY (RAM)
B13 CONTROL MEMORY (SDRAM)

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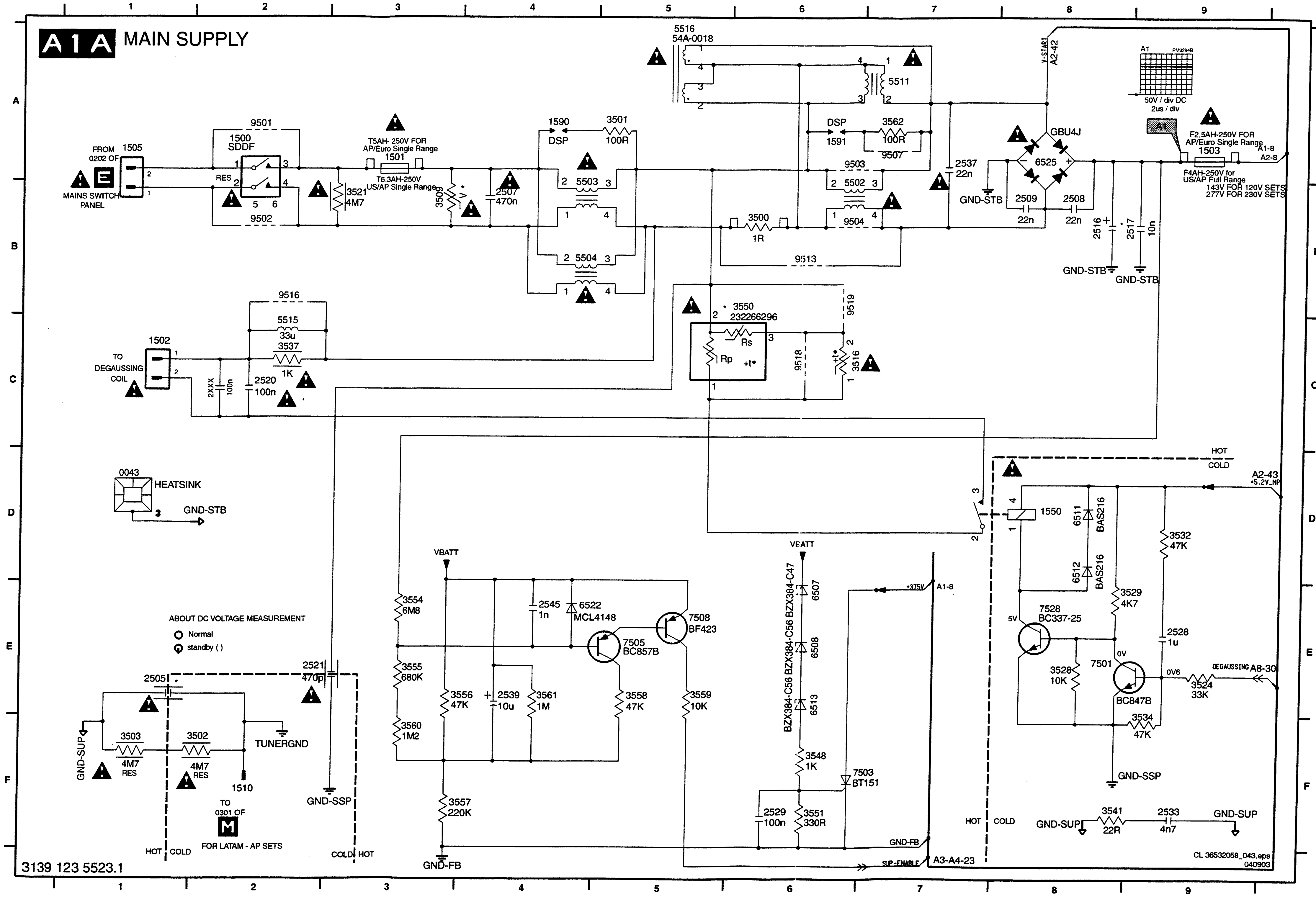
260903

7. Circuit Diagrams and PWB Layouts

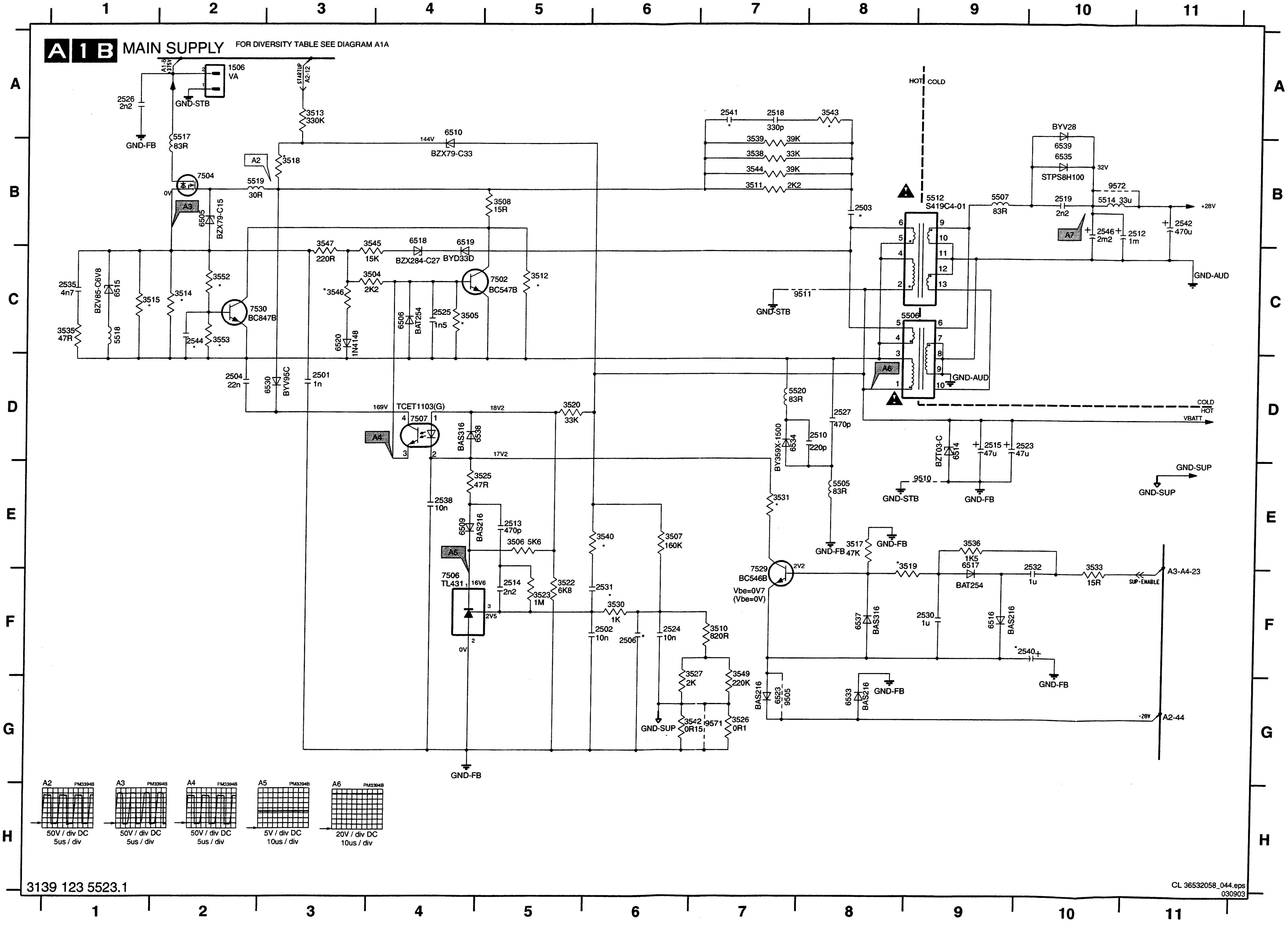
Large Signal Panel: Main Supply


A1A MAIN SUPPLY
FROM 0202 OF
1505
MAINS SWITCH PANEL
9501
1500 SDDF
RES
9502
T5AH- 250V FOR AP/Euro Single Range
1501
T6,3AH-250V US/AP Single Range
3521 4M7
3509
2507 470n
1590 DSP
3501 100R
5503
5504
5516 54A-0018
5511
DSP 1591
3562 100R
9507
9503
5502
9504
3500 1R
9513
2537 22n
GND-STB
GBU4J
6525
2509 22n
2508 22n
2516
2517
10n
GND-STB
V-START A2-42
A1
50V / div DC 2us / div
F2,5AH-250V FOR AP/Euro Single Range
1503
F4AH-250V for US/AP Full Range
143V FOR 120V SETS 277V FOR 230V SETS
A1-8
A2-8
9516
5515 33u
3537 1K
1502
TO DEGAUSSING COIL
2XXX 100n
2520 100n
3550 232266296
Rs
Rp
9518
9519
3516
0043 HEATSINK
GND-STB
HOT COLD
A2-43 +5.2V_MP
1550
6511 BAS216
6512 BAS216
3532 47K
3529 4K7
7528 BC337-25
5V
2528 1u
3528 10K
7501
0V
0V6
BC847B
DEGAUSSING A8-30
3524 33K
3534 47K
GND-SSP
VBATT
3554 6M8
2545 1n
6522 MCL4148
7508 BF423
7505 BC857B
3555 680K
3556 47K
2539 10u
3561 1M
3558 47K
3559 10K
3560 1M2
3557 220K
GND-FB
ABOUT DC VOLTAGE MEASUREMENT
Normal
standby ( )
2505
2521 470p
3503 4M7 RES
3502 4M7 RES
TUNERGND
GND-SUP
1510
TO 0301 OF
FOR LATAM - AP SETS
GND-SSP
HOT COLD
COLD HOT
VEATT
BZX384-C56 BZX384-C56 BZX384-C47
6507
6508
6513
3548 1K
7503 BT151
2529 100n
3551 330R
+375V A1-8
GND-FB
SUP-ENABLE A3-A4-23
HOT COLD
GND-SUP
3541 22R
2533 4n7
GND-SUP
CL 36532058_043.eps 040903
3139 123 5523.1

0043 D1
1500 A2
1501 A3
1502 C1
1503 A9
1505 A1
1510 F2
1550 D8
1590 A4
1591 A6
2505 E1
2507 B4
2508 B8
2509 B8
2516 B8
2517 B9
2520 C2
2521 E2
2528 E9
2529 F6
2533 F9
2537 A7
2539 E4
2545 E4
2547 C2
3500 B6
3501 A5
3502 F2
3503 F1
3509 B3
3516 C6
3521 B3
3524 E9
3528 E8
3529 E9
3532 D9
3534 F9
3537 C2
3541 F8
3548 F6
3550 B6
3551 F6
3554 E3
3555 E3
3556 E4
3557 F4
3558 E5
3559 E5
3560 F3
3561 E4
3562 A7
5502 B6
5503 B4
5504 B4
5511 A7
5515 C2
5516 A5
6507 E6
6508 E6
6511 D8
6512 D8
6513 E6
6522 E4
6525 A8
7501 E8
7503 F7
7505 E5
7508 E5
7528 E8
9501 A2
9502 B2
9503 A6
9504 B6
9507 A7
9513 B6
9516 B2
9518 C6
9519 B6

Item	Remarks	Europe	NAFTA	China	AP single range	AP full range	DESCRIPTION
1501		—	V	—	—	V	FUSE 5X20 HT 6A3 250V IEC B
1501		V	—	V	V	—	FUSE 5X20 HT 5A 250V IEC B
1503		—	V	—	—	V	FUSE 5X20 F 4A 250V IEC B
1503		V	—	V	V	—	FUSE 5X20 F 2A5 250V IEC B
1591		V	—	V	—	V	SURGE PROTECT DSP-501N-A21F A
2100	in A2	—	—	—	V	—	CERSAF KX 250V S 470P PM10 B
2100	in A2	V	V	V	—	V	CERSAF KX 250V S 1N PM20 B
2503		V	—	V	V	—	CAP MPOL 100V S 33N PM10 A
2503		—	V	—	—	V	CAP MPOL 100V S 39N PM5 A
2505		V	V	—	V	—	CERSAF KX 250V S 470P PM10 B
2505		—	—	V	—	V	CERSAF KX 250V S 1N PM20 B
2506		—	V	—	—	V	CAP POL 50V S 47N PM10 COL A
2515		V	—	—	—	—	ELCAP JA 200V S 47U P50M10 B
2515		—	V	—	—	—	ELCAP JA 200V S 47U P50M10 B
2515		—	—	V	—	—	ELCAP JA 200V S 47U P50M10 B
2515		—	—	—	V	V	ELCAP JA 200V S 47U P50M10 B
2516		—	—	—	—	V	ELCAP USR 400V S 470U PM20 B
2516		—	—	V	—	—	ELCAP LQ 450V S 220U PM20 B
2516		—	V	—	—	—	ELCAP USR 200V S 680U PM20 B
2516		V	—	—	V	—	ELCAP 057 400V S 220U PM20 B
2517		—	—	—	—	V	CAP MPOL 400V S 10N PM10 A
2518		V	—	V	V	—	CER2 DC B 500V S 100P COL A
2518		—	V	—	—	V	CER2 DC B 500V S 330P COL A
2521		—	V	—	—	V	CERSAF KX 250V S 1N PM20 B
2524		V	—	V	V	—	CER2 0603 X7R 50V 10N COL
2529		—	V	—	—	V	CER2 0603 Y5V 25V 100N COL
2531		V	—	V	V	—	CER2 DC B 500V S 1N COL A
2531		—	V	—	—	V	CER2 DC B 500V S 1N5 COL A
2539		—	V	—	—	V	ELCAP 5MM 35V 10U PM20 COL A
2540		V	—	V	V	—	ELCAP 50V S 1U PM20 COL A
2540		—	V	—	—	V	ELCAP 50V S 10U PM20 COL A
2541		V	—	V	V	—	CER2 DC B 500V S 100P COL A
2541		—	V	—	—	V	CER2 DC B 500V S 330P COL A
2544		—	V	—	—	V	CER2 0603 X7R 50V 1N COL
2544		V	—	V	V	—	CER2 0603 X7R 50V 2N2 COL
3500		—	V	—	V	V	RST WW 10W RMW10L S 0R56 PM5 B
3502		—	V	—	—	—	RST MGL VR37 A 4M7 PM5 A
3503		—	V	—	—	—	RST MGL VR37 A 4M7 PM5 A
3505		—	V	—	—	V	RST CRB 1/6W A 150K PM5 COL A
3505		V	—	V	V	—	RST CRB 1/6W A 22K PM5 COL A
3509		V	—	V	V	V	VDR DC 1MA/612V S MAX 1120V B
3509		—	V	—	—	—	VDR DC 1MA/423V S MAX 800V B
3512		V	—	V	V	—	RST SM 0603 220K PM5 COL
3512		—	V	—	—	V	RST SM 0603 330K PM5 COL
3514		V	—	V	V	—	RST MFLM PR01 S 0R39 PM5 B
3514		—	V	—	—	V	RST POW 1W S 0R22 PM5 COL B
3515		V	—	V	V	—	RST MFLM PR01 S 0R39 PM5 B
3515		—	V	—	—	V	RST POW 1W S 0R22 PM5 COL B
3518		—	V	—	—	V	RST MGL VR25 A 330K PM5 A
3518		V	—	V	V	—	RST CRB 1/6W A 100K PM5 COL A
3519		V	—	V	V	—	RST SM 0603 1K PM5 COL
3519		—	V	—	—	V	RST SM 0603 1K2 PM5 COL
3531		—	V	—	—	V	RST SM 0805 4K7 PM5 COL R
3531		V	—	V	V	—	RST SM 0805 6K8 PM5 COL R
3538		—	V	—	—	V	RST SM 0805 33K PM5 COL R
3539		—	V	—	—	V	RST SM 0805 39K PM5 COL R
3540		—	V	—	—	V	RST CRB 1/6W A 10K PM5 COL A
3540		V	—	V	V	—	RST CRB 1/6W A 33K PM5 COL A
3543		—	V	—	—	V	RST CRB 1/6W A 1K PM5 COL A

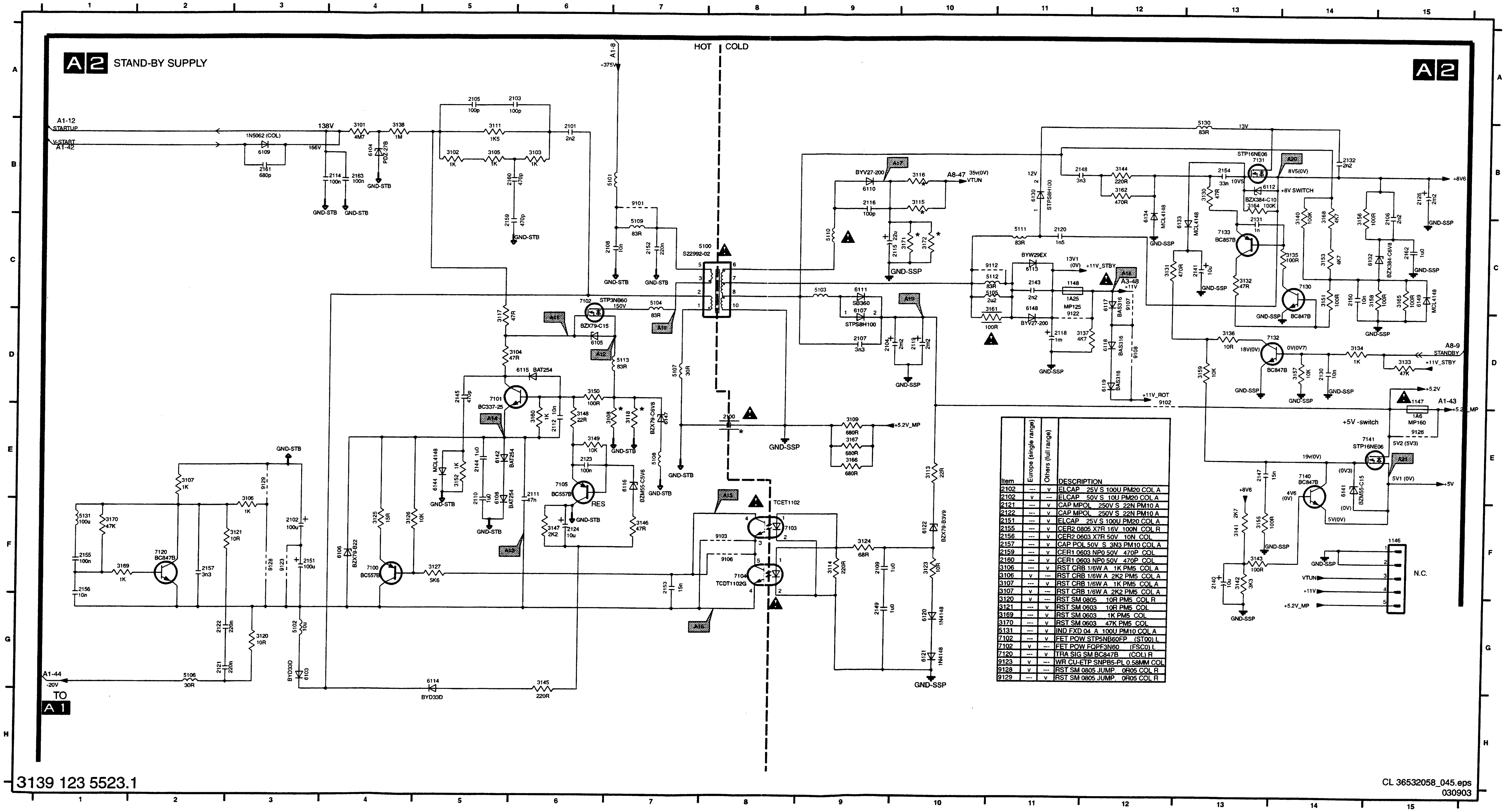
Large Signal Panel: Main Supply


A1B MAIN SUPPLY
FOR DIVERSITY TABLE SEE DIAGRAM A1A
1 2 3 4 5 6 7 8 9 10 11
A B C D E F G H
A1-8 375V
1506 VA
GND-STB
2526 2n2
GND-FB
5517 83R
STARTUP A2-12
3513 330K
144V
6510 BZX79-C33
A2
3518
5519 30R
7504
0V
A3
6505 BZX79-C15
3508 15R
3547 220R
3545 15K
6518 BZX284-C27
6519 BYD33D
3504 2K2
3546
7502 BC547B
3512
2535 4n7
BZV85-C6V8
6515
3535 47R
5518
3515
3514
3552
7530 BC847B
2544
3553
6520 1N4148
6506 BAT254
2525 1n5
3505
2504 22n
6530 BYV95C
2501 1n
169V
TCET1103(G)
7507
A4
18V2
17V2
BAS316 6538
3520 33K
3525 47R
2538 10n
6509 BAS216
2513 470p
3506 5K6
A5
7506 TL431
16V6
2V5
0V
2514 2n2
3523 1M
3522 6K8
3540
2531
3530 1K
2502 10n
2506
3507 160K
2524 10n
3510 820R
3527 2K
3549 220K
GND-SUP
3542 0R15
9571
3526 0R1
HOT COLD
2541
2518 330p
3543
3539 39K
3538 33K
3544 39K
3511 2K2
2503
5512 S419C4-01
5506
9511
A6
GND-AUD
5507 83R
BYV28 6539
6535 STPS8H100
32V
2519 2n2
9572
5514 33u
+28V
A7
2546 2m2
2512 1m
2542 470u
COLD HOT
VBATT
5520 83R
2527 470p
BY359X-1500
6534
2510 220p
5505 83R
BZT03-C 6514
2515 47u
2523 47u
9510
3531
3517 47K
7529 BC546B
2V2
Vbe=0V7
(Vbe=0V)
3519
3536 1K5
6517 BAT254
2532 1u
3533 15R
SUP-ENABLE
A3-A4-23
2530 1u
6537 BAS316
6516 BAS216
2540
6523 9505 BAS216
6533 BAS216
-28V
A2-44
A2 PM3394B 50V / div DC 5us / div
A3 PM3394B 50V / div DC 5us / div
A4 PM3394B 50V / div DC 5us / div
A5 PM3394B 5V / div DC 10us / div
A6 PM3394B 20V / div DC 10us / div
3139 123 5523.1
CL 36532058_044.eps
030903

1506	A2
2501	D3
2502	F6
2503	B8
2504	D2
2506	F6
2510	D8
2512	B11
2513	E5
2514	F5
2515	D9
2518	A7
2519	B10
2523	D10
2524	F6
2525	C4
2526	A1
2527	D8
2530	F9
2531	F6
2532	F10
2535	C1
2538	E4
2540	F10
2541	A7
2542	B11
2544	C2
2546	B10
3504	C3
3505	C4
3506	E5
3507	E6
3508	B5
3510	F7
3511	B7
3512	C5
3513	A3
3514	C2
3515	C1
3517	E8
3518	B3
3519	F8
3520	D5
3522	F5
3523	F5
3525	E5
3526	G7
3527	F7
3530	F6
3531	E7
3533	F10
3535	C1
3536	E9
3538	B7
3539	B7
3540	E6
3542	G7
3543	A8
3544	B7
3545	C3
3546	C3
3547	C3
3549	F7
3552	C2
3553	C2
5505	E8
5506	C8
5507	B9
5512	B9
5514	B10
5517	A2
5518	C1
5519	B2
5520	D7
6505	B2
6506	C4
6509	E4
6510	A4
6514	D9
6515	C1
6516	F9
6517	E9
6518	B4
6519	B4
6520	C3
6523	G7
6530	D3
6533	G8
6534	D7
6535	B10
6537	F8
6538	D4
6539	B10
7502	C5
7504	B2
7506	F4
7507	D4
7529	F7
7530	C2
9505	G7
9510	E9
9511	C7
9571	G7
9572	B10

Large Signal Panel: Standby Supply

1146 F15
1147 D15
1148 C11
2100 E8
2101 B6
2102 F3
2103 A5
2104 D9
2105 A5
2106 B15
2107 D9
2108 C6
2109 F9
2110 E5
2111 E6
2112 E6
2114 B4
2115 C9
2116 B9
2118 D11
2119 D10
2120 C11
2121 G2
2122 G2
2123 E6
2124 F6
2126 B15
2130 D14
2131 C13
2132 B14
2140 F13
2141 C13
2143 C11
2144 E5
2145 D5
2147 E13
2148 B11
2149 G9
2150 C14
2151 F3
2152 C7
2153 F7
2154 B13
2155 F1
2156 F1
2157 F2
2159 C5
2160 B5
2161 B3
2162 C15
2163 B4
3101 B4
3102 B5
3103 B6
3104 D6
3105 B5
3106 F3
3107 E2
3108 E7
3109 E9
3111 B5
3113 E10
3114 F9
3115 B10
3116 B10
3117 D5
3118 E7
3120 G3
3121 F3
3123 F10
3124 F9
3125 F4
3126 F4
3127 F5
3130 B13
3131 C12
3132 C13
3133 D15
3134 D14
3135 C14
3136 D13
3137 D11
3138 B4
3140 C14
3141 F13
3142 F13
3143 F13
3144 B12
3145 G6
3146 F7
3147 F6
3148 E6
3149 E6
3150 D6
3151 C14
3152 E5
3153 C14
3155 F13
3156 C14
3157 D14
3158 C15
3159 D13
3160 E6
3161 D10
3162 B12
3164 B13
3165 C15
3166 E9
3167 E9
3168 B14
3169 F1
3170 F1
3171 C10
3172 C10
5100 C7
5101 B6
5102 G3
5103 C9
5104 C7
5105 C10
5106 G2
5107 D7
5108 E7
5109 C7
5110 C9
5111 C11
5112 C10
5113 D7
5130 B13
5131 F1
6103 G3
6104 B4
6105 D6
6106 F4
6107 D9
6108 E5
6109 B3
6110 B9
6111 C9
6112 B13
6113 C11
6114 G5
6115 D6
6116 E7
6117 C12
6118 D12
6119 D12
6120 G10
6121 G10
6122 F10
6130 B11
6132 C14
6133 C12
6134 B12
6141 E14
6142 E5
6144 E5
6147 E7
6148 C11
6149 C15
7100 F4
7101 D5
7102 C6
7103 F8
7104 F8
7105 E6
7120 F2
7130 C14
7131 B13
7132 D14
7133 C13
7140 E14
7141 E14
9101 B7
9102 D12
9103 F8
9106 F8
9107 C12
9108 D12
9112 C10
9122 D11
9123 F3
9126 E15
9128 F3
9129 E3


A2 STAND-BY SUPPLY
A2
HOT
COLD
A1-8
+375V
A1-12 STARTUP
V-START A1-42
138V
166V
1N5062 (COL)
GND-STB
GND-SSP
5100 S22992-02
7102 STP3NB60 150V
BZX79-C15
7101 BC337-25
7105 BC557B
RES
7100 BC557B
7120 BC847B
TCET1102
7104 TCDT1102G
BYV27-200
A8-47
35V(0V)
VTUN
12V
STPS8H100
BYW29EX
13V1 (0V)
+11V_STBY
A3-48 +11V
SB360
MP125
+11V_ROT
9102
+5.2V_MP
STP16NE06 7131
8V5(0V)
+8V SWITCH
+8V6
BZX384-C10
7133 BC857B
7130 BC847B
7132 BC847B
A8-9 STANDBY
+11V_STBY
+5.2V
A1-43
+5.2V_MP
+5V -switch
1A6 MP160
7141 STP16NE06
5V2 (5V3)
5V1 (0V)
+5V
7140 BC847B
BZM55-C15
1146
VTUN
+11V
+5.2V_MP
N.C.
A1-44
-20V
TO
A1
BYD33D
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
A
B
C
D
E
F
G
H

Item	Europe (single range)	Others (full range)	DESCRIPTION
2102	---	v	ELCAP 25V S 100U PM20 COL A
2102	v	---	ELCAP 50V S 10U PM20 COL A
2121	---	v	CAP MPOL 250V S 22N PM10 A
2122	---	v	CAP MPOL 250V S 22N PM10 A
2151	---	v	ELCAP 25V S 100U PM20 COL A
2155	---	v	CER2 0805 X7R 16V 100N COL R
2156	---	v	CER2 0603 X7R 50V 10N COL
2157	---	v	CAP POL 50V S 3N3 PM10 COL A
2159	---	v	CER1 0603 NP0 50V 470P COL
2160	---	v	CER1 0603 NP0 50V 470P COL
3106	---	v	RST CRB 1/6W A 1K PM5 COL A
3106	v	---	RST CRB 1/6W A 2K2 PM5 COL A
3107	---	v	RST CRB 1/6W A 1K PM5 COL A
3107	v	---	RST CRB 1/6W A 2K2 PM5 COL A
3120	v	---	RST SM 0805 10R PM5 COL R
3121	---	v	RST SM 0603 10R PM5 COL
3169	---	v	RST SM 0603 1K PM5 COL
3170	---	v	RST SM 0603 47K PM5 COL
5131	---	v	IND FXD 04 A 100U PM10 COL A
7102	---	v	FET POW STP5NB60FP (ST00) L
7102	v	---	FET POW FQPF3N60 (FSC0) L
7120	---	v	TRA SIG SM BC847B (COL) R
9123	v	---	WR CU-ETP SNPB5-PL 0.58MM COL
9128	v	---	RST SM 0805 JUMP. 0R05 COL R
9129	---	v	RST SM 0805 JUMP. 0R05 COL R

3139 123 5523.1

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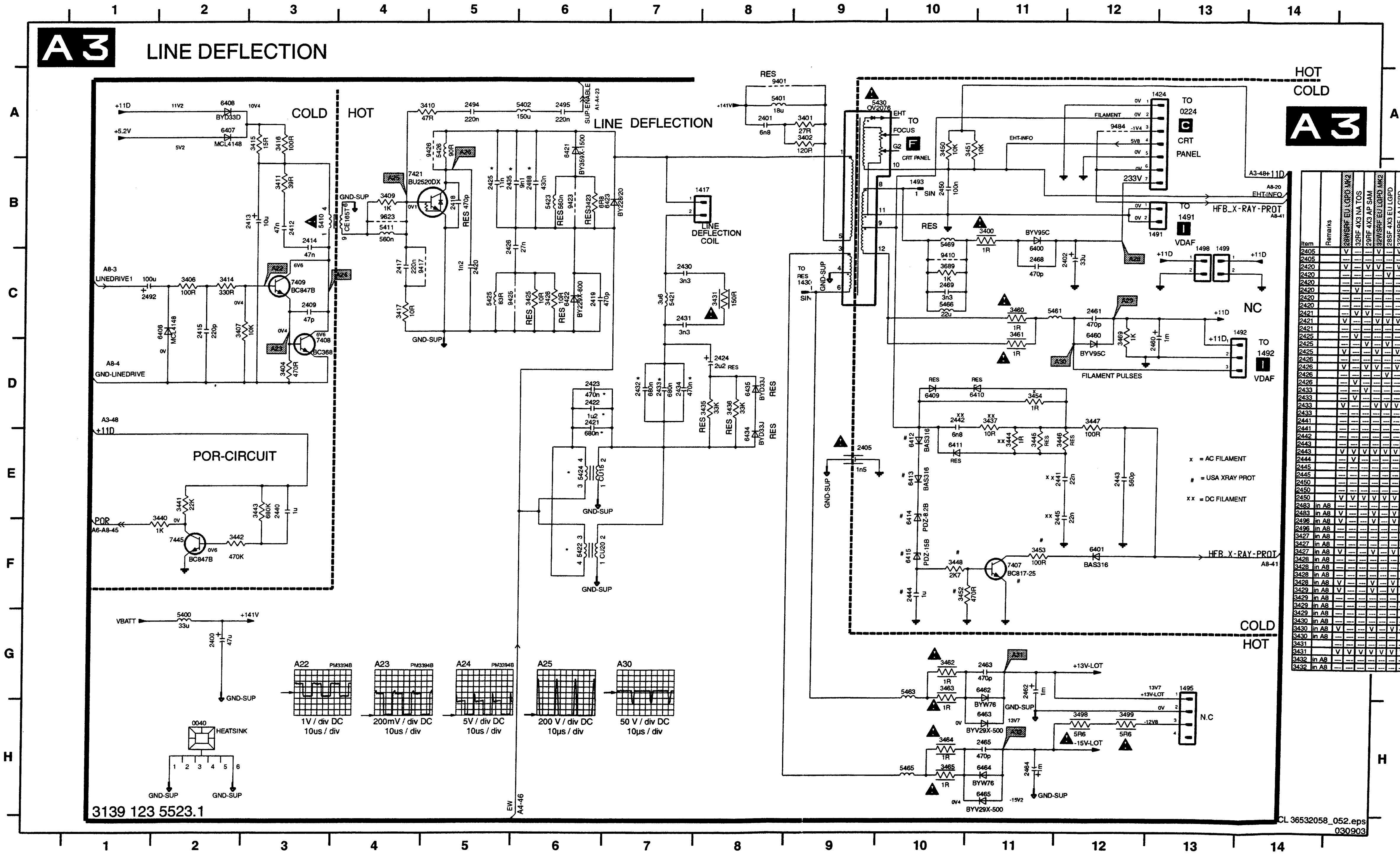
Large Signal Panel: Line Deflection

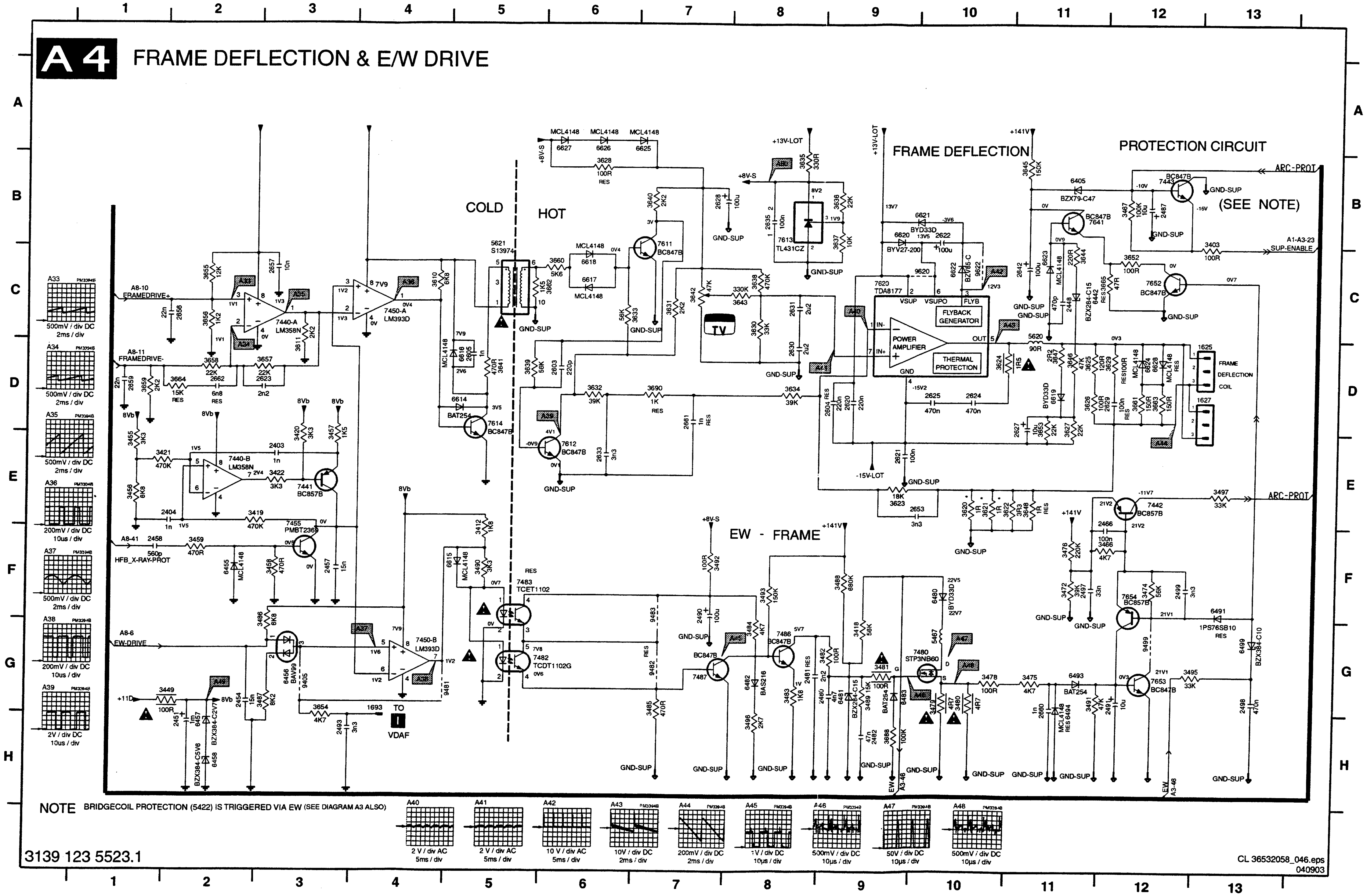
0040	H2
1417	B7
1424	A12
1430	C9
1491	B13
1492	C13
1493	B10
1495	G13
1498	C13
1499	C13
2400	G2
2401	A8
2402	C12
2405	E9
2409	C3
2412	B3
2413	B3
2414	B3
2415	C2
2417	C4
2418	B5
2419	C6
2420	C5
2421	D6
2422	D6
2423	D6
2424	D8
2425	B5
2426	B5
2430	C7
2431	C7
2432	D7
2433	D7
2434	D7
2435	B5
2440	E3
2441	E12
2442	D10
2443	E12
2444	F10
2445	E12
2450	B10
2460	D13
2461	C12
2462	G11
2463	G11
2464	H11
2465	H11
2468	C11
2469	C10
2488	B6
2492	C1
2494	A5
2495	A6
3400	B11
3401	A9
3402	A9
3404	D3
3406	C2
3407	C2
3409	B4
3410	A4
3411	B3
3414	C2
3415	A3
3416	A3
3417	C4
3423	B6
3425	C6
3426	C6
3431	C8
3435	D8
3436	D8
3437	D11
3440	F2
3441	E2
3442	F2
3443	E3
3444	E11
3445	E11
3446	E12
3447	D12
3448	F10
3450	A10
3451	A10
3452	F10
3453	F11
3454	D11
3460	C11
3461	C11
3462	G10
3463	G10
3464	H10
3465	H10
3469	D12
3498	H12
3499	H12
3689	C10
5400	G2
5401	A8
5402	A6
5410	B3
5411	B4
5421	C7
5422	F6
5423	B6
5424	E6
5425	C5
5426	A5
5430	A9
5461	C11
5463	G10
5465	H10
5466	C10
5469	B10
6400	B11
6401	F12
6406	C2
6407	A2
6408	A2
6409	D10
6410	D11
6411	E10
6412	E10
6413	E10
6414	E10
6415	F10
6421	A6
6422	C6
6423	B6
6434	E8
6435	D8
6460	C12
6462	G11
6463	H11
6464	H11
6465	H11
7407	F11
7408	D3
7409	C3
7421	B4
7445	F2
9401	A8
9410	C10
9417	C4
9423	B6
9425	C5
9426	A5
9484	A12
9623	B4


A3
LINE DEFLECTION
COLD
HOT
+11D
11V2
6408
BYD33D
10V4
+5.2V
6407
MCL4148
5V2
3415 15R
3416 100R
3411 39R
2413 10u
2412 47n
5410
2414 47n
A8-3
LINEDRIVE1
100u
2492
3406 100R
3414 330R
0V4
7409
BC847B
6V6
2409 47p
6406 MCL4148
0V
2415 220p
3407 10K
7408
BC368
3404 470R
A8-4
GND-LINEDRIVE
A22
A23
A24
A25
A26
A3-48
+11D
POR-CIRCUIT
3441 22K
3443 680K
2440 1u
POR
A6-A8-45
3440 1K
7445
BC847B
0V6
3442 470K
VBATT
5400 33u
+141V
2400 47u
GND-SUP
0040
HEATSINK
1 2 3 4 5 6
3139 123 5523.1
GND-SUP
CE165T
3409 1K
9623
5411 560n
0V1
7421
BU2520DX
3410 47R
2494 220n
5402 150u
2495 220n
SUP-ENABLE
A1-A4-23
9426
5426 90R
2418
RES 470p
2417 220n
9417
3417 10R
1n2 2420
2425 11n
2435 9n1
2488 430n
6421 BY359X-1500
5423 RES 560n
9423
RES 3423 6R8
6423 BY228/20
2426 27n
5425 83R
9425
RES 3425 10R
3426 RES 10R
6422 BY229X-600
2419 470p
EW
A4-46
1417
LINE DEFLECTION COIL
2430 3n3
3u6 5421
3431 150R
2431 3n3
2424 2u2 RES
2432 680n
2433 680n
2434 470n
RES 3435 33K
RES 3436 33K
6435 BYD33J RES
6434 BYD33J RES
2423 470n
2422 1u2
2421 680n
5424 CU15
5422 CU20
RES
9401
+141V
5401 18u
2401 6n8
3401 27R
3402 120R
5430
OV2076
EHT
TO FOCUS
G2
F
CRT PANEL
TO RES 1430
SIN
2405 1n5
1493
1 SIN
3450 10K
3451 10K
2450 100n
EHT-INFO
RES
5469
9410
3689 1K
2469 3n3
5466 22u
3400 1R
BYV95C
6400
2468 470p
2402 33u
1424
0V
FILAMENT
9484
-1V4
5V8
233V
TO 0224
C
CRT PANEL
A3-48+11D
A8-20
EHT-INFO
HFB_X-RAY-PROT
A8-41
1491
TO 1491
I
VDAF
1498
1499
+11D
3460 1R
3461 1R
5461
2461 470p
A29
6460 BYV95C
A30
3469 1K
2460 1m
+11D
NC
1492
TO 1492
FILAMENT PULSES
RES 6409
RES 6410
3454 1R
2442 6n8
3437 10R
3444 1R
3445 RES
3446 RES
3447 100R
6411 RES
6412 BAS316
6413 BAS316
6414 PDZ-8.2B
6415 PDZ-15B
2441 22n
2445 22n
2443 560p
x = AC FILAMENT
# = USA XRAY PROT
xx = DC FILAMENT
3448 2K7
3452 470R
7407
BC817-25
3453 100R
6401 BAS316
2444 1u
HFB_X-RAY-PROT
A8-41
3462 1R
3463 1R
5463
2463 470p
A31
6462 BYW76
6463 BYV29X-500
13V7
+13V-LOT
2462 1m
1495
N.C
-12V8
3498 5R6
3499 5R6
-15V-LOT
3464 1R
3465 1R
5465
2465 470p
A32
6464 BYW76
6465 BYV29X-500
-15V2
0V4
2464 1m
GND-SUP
1V / div DC 10us / div
200mV / div DC 10us / div
5V / div DC 10us / div
200 V / div DC 10µs / div
50 V / div DC 10µs / div
PM3394B
CL 36532058_052.eps
030903

Item	Remarks	28WSRF EU LGPD MK2	32RF 4X3 NA TOS	29RF 4X3 AP SAM	32WSRF EU LGPD MK2	28SF 4X3 EU LGPD	32WSRF LA LGPD	36WSRF LA MEC	34WSRF NA MEC	34RF 4X3 AP LGPD	32RF 4X3 NA LGPD	27RF 4X3 NA SAM	30WSRF NA LGPD MK2	29RF 4X3 EU LGPD	36WSRF LGPD	DESCRIPTION
2405		V	—	—	V	—	V	—	—	—	—	—	—	V	—	CERSAF NSA 250V S 1N PM20 B
2405		—	—	—	—	—	—	—	—	—	—	—	—	—	V	CERSAF KX 250V S 470P PM10 B
2420		V	—	V	V	—	V	—	—	—	—	V	—	—	—	CAP PP-MPP 2KV S 1N PM5 B
2420		—	—	—	—	V	—	—	—	—	—	—	—	—	—	CAP PP-MPP 2KV S 1N2 PM5 B
2420		—	—	—	—	—	—	—	—	V	V	—	V	—	—	CAP PP-MPP 2KV S 680P PM5 B
2420		—	V	—	—	—	—	—	—	—	—	—	—	—	—	CAP PP-MPP 2KV S 1N8 PM5 B
2420		—	—	—	—	—	—	—	—	—	—	—	—	V	—	CAP PP-MPP 2KV S 1N5 PM5 B
2420		—	—	—	—	—	—	V	V	—	—	—	—	—	V	CAP PP-MPP 2KV S 820P PM5 B
2421		—	V	V	—	—	—	—	—	—	—	—	—	V	—	CAP MPP 250V S 560N PM5 B
2421		V	—	—	V	V	V	V	V	—	—	V	V	—	V	CAP MPP 250V S 1U2 PM5 B
2421		—	—	—	—	—	—	—	—	V	V	—	—	—	—	CAP MPP 479 250V S 430N PM5 B
2425		—	V	—	—	—	—	—	—	V	V	—	—	—	—	CAP PP-MPP 2KV S 8N2 PM5 B
2425		—	—	V	—	V	—	V	V	—	—	V	—	V	V	CAP PP-MPP 2KV S 9N1 PM5 B
2425		V	—	—	V	—	V	—	—	—	—	—	V	—	—	CAP PP-MPP 2KV S 10N PM5 B
2426		—	—	—	—	—	—	—	—	—	—	V	—	—	—	CAP PP-MPP 630V S 18N PM5 B
2426		V	—	V	V	—	V	V	V	—	—	—	V	V	V	CAP PP-MPP 630V S 22N PM5 B
2426		—	—	—	—	V	—	—	—	—	—	—	—	—	—	CAP PP-MPP 630V S 24N PM5 B
2426		—	V	—	—	—	—	—	—	V	V	—	—	—	—	CAP PP-MPP 630V S 20N PM5 B
2433		—	—	V	—	—	—	—	—	—	—	V	—	V	—	CAP MPP 250V S 510N PM5 B
2433		—	V	—	—	—	—	—	—	—	—	—	—	—	—	CAP MPP 250V S 820N PM5 B
2433		V	—	—	V	V	V	V	V	—	—	—	V	—	V	CAP MPP 250V S 360N PM5 B
2433		—	—	—	—	—	—	—	—	V	V	—	—	—	—	CAP MPP 479 250V S 560N PM5 B
2441		—	—	—	—	—	—	—	—	—	—	—	—	—	V	CER2 0805 X7R 50V 22N COL R
2441		—	—	—	—	—	—	—	—	—	V	V	—	—	—	CER2 0603 X7R 25V 22N COL
2442		—	—	—	—	—	—	—	—	—	V	V	—	—	V	CER2 0805 X7R 50V 6N8 COL R
2443		—	—	—	—	—	—	—	—	—	V	V	—	—	—	CER1 0805 NP0 50V 560P COL R
2443		V	V	V	V	V	V	V	V	V	—	—	V	V	V	CER2 0805 X7R 50V 470P COL R
2444		—	V	—	—	—	—	V	V	—	V	V	V	—	V	CER2 0805 X7R 16V 1U PM10 R
2445		—	—	—	—	—	—	—	—	—	—	—	—	—	V	CER2 0805 X7R 50V 22N COL R
2445		—	—	—	—	—	—	—	—	—	V	V	—	—	—	CER2 0603 X7R 25V 22N COL
2450		—	—	—	—	—	—	V	V	V	V	—	V	—	V	CAP MPOL 63V S 220N PM10 A
2450		—	—	—	—	—	—	—	—	—	—	V	—	—	—	CAP MPOL 63V S 330N PM10 A
2450		V	V	V	V	V	V	—	—	—	—	—	—	V	—	CAP MPOL 100V S 100N PM10 A
2483	in A8	—	—	—	—	—	—	—	—	—	—	—	V	—	—	CER2 0603 X7R 16V 100N COL
2483	in A8	V	—	—	V	—	V	V	V	V	V	—	—	V	V	CER2 0603 X7R 50V 15N COL
2496	in A8	V	—	—	V	—	V	V	V	V	V	—	V	V	V	CER2 0603 X7R 16V 100N COL
2496	in A8	—	—	—	—	—	—	—	—	—	—	V	—	—	—	CER2 0603 X7R 50V 6N8 COL
3427	in A8	—	—	—	—	—	—	—	—	—	—	—	—	V	—	RST SM 0603 100K PM5 COL
3427	in A8	—	—	—	—	—	—	V	V	—	—	V	V	—	V	RST SM 0603 56K PM5 COL
3427	in A8	V	—	—	V	—	V	—	—	V	V	—	—	—	—	RST SM 0603 68K PM5 COL
3428	in A8	—	—	—	—	—	—	—	—	V	V	—	—	—	—	RST SM 0603 RC21 560K PM5 R
3428	in A8	—	—	—	—	—	—	—	—	—	—	—	—	—	V	RST SM 0603 RC21 820K PM5 R
3428	in A8	—	—	—	—	—	—	—	—	—	—	—	V	—	—	RST SM 0603 330K PM5 COL
3428	in A8	V	—	—	V	—	V	V	V	—	—	V	—	V	—	RST SM 0603 680K PM5 COL
3429	in A8	V	—	—	V	—	V	—	—	—	—	—	—	—	V	RST SM 0603 10K PM5 COL
3429	in A8	—	—	—	—	—	—	—	—	—	—	—	V	—	—	RST SM 0603 100K PM5 COL
3429	in A8	—	—	—	—	—	—	—	—	V	V	—	—	V	—	RST SM 0603 22K PM5 COL
3429	in A8	—	—	—	—	—	—	V	V	—	—	—	—	—	—	RST SM 0603 33K PM5 COL
3430	in A8	—	—	—	—	—	—	—	—	—	—	—	V	—	—	RST SM 0603 100K PM5 COL
3430	in A8	V	—	—	V	—	V	—	—	—	—	—	—	—	—	RST SM 0603 12K PM5 COL
3430	in A8	—	—	—	—	—	—	V	V	V	V	—	—	V	V	RST SM 0603 22K PM5 COL
3431		—	—	—	—	—	—	—	—	V	V	—	—	—	—	RST FUSE NFR25 S 220R PM5 A
3431		V	V	V	V	V	V	V	V	—	—	V	V	V	V	RST FUSE NFR25H S 150R PM5 A
3432	in A8	—	—	—	—	—	—	—	—	V	V	—	—	—	—	RST SM 0603 RC21 390K PM5 R
3432	in A8	—	—	—	—	—	—	—	—	—	—	V	—	—	—	RST SM 0603 RC21 470K PM5 R

Large Signal Panel: Frame Deflection & E/W Drive

1625	D12
1627	D12
1693	G4
2403	E3
2404	E2
2448	C11
2451	H2
2454	G2
2457	F3
2458	F1
2466	E12
2480	G9
2481	G8
2482	H9
2487	B12
2490	F7
2491	G12
2493	H3
2497	F11
2498	G13
2499	F12
2603	D6
2604	D9
2605	D5
2620	D9
2621	E9
2622	B10
2623	D3
2624	D10
2625	D10
2627	D11
2628	B7
2629	D12
2630	D8
2631	C8
2633	E6
2635	B8
2642	C11
2653	E10
2656	C2
2657	C3
2659	D1
2660	G11
2661	D7
2662	D2
3403	B13
3412	F5
3418	G9
3419	E2
3420	E3
3421	E1
3422	E3
3449	G2
3455	E1
3456	E1
3457	E3
3458	F3
3459	F2
3466	F12
3467	B12
3472	F11
3474	F12
3475	G11
3476	F11
3478	G10
3479	G10
3480	G10
3481	G9
3482	G9
3483	G8
3484	G8
3485	G7
3486	G3
3487	G3
3488	F9
3489	G9
3490	F5
3491	G11
3492	F7
3493	F8
3495	G12
3496	H8
3497	E13
3610	C4
3611	D3
3620	E10
3621	E10
3622	E10
3623	E9
3624	D10
3625	D11
3626	D11
3627	D11
3628	B6
3629	D12
3630	C8
3631	C7
3632	D6
3633	C6
3634	D8
3635	B8
3636	B9
3637	B9
3638	C8
3639	D5
3640	B7
3641	D5
3642	C7
3643	C8
3644	C11
3645	B11
3646	D11
3647	D11
3648	E11
3652	C12
3653	D11
3654	G3
3655	C2
3656	C2
3657	D3
3658	D2
3659	D1
3660	C6
3661	D12
3662	C6
3663	D12
3664	D2
3665	C11
3688	H9
3690	D7
5467	G10
5620	C11
5621	C5
6405	B11
6442	C11
6455	F2
6456	G3
6457	H2
6458	H2
6480	F10
6481	G9
6482	G8
6483	G9
6491	F13
6493	G11
6494	G11
6499	G13
6614	D5
6615	F5
6616	D5
6617	C6
6618	C6
6619	D11
6620	B9
6621	B10
6622	C10
6623	C11
6624	D12
6625	A7
6626	A6
6627	A6
6628	D12
7440-A	C3
7440-B	E2
7441	E3
7442	E12
7443	B12
7450-A	C4
7450-B	G4
7455	F3
7480	G10
7482	G5
7483	F5
7486	G8
7487	G7
7611	C7
7612	E6
7613	B8
7614	D5
7620	C9
7641	B11
7652	C12
7653	G12
7654	F12
9405	G3
9481	G4
9482	G7
9483	F7
9499	G12
9620	C10
9622	C10



A4
FRAME DEFLECTION & E/W DRIVE
COLD
HOT
FRAME DEFLECTION
PROTECTION CIRCUIT
(SEE NOTE)
EW - FRAME
TV
A8-10 FRAMEDRIVE+
A8-11 FRAMEDRIVE-
A8-41 HFB_X-RAY-PROT
A8-6 EW-DRIVE
TO VDAF
ARC-PROT
A1-A3-23 SUP-ENABLE
FRAME DEFLECTION COIL
7620 TDA8177
VSUP VSUPO FLYB
FLYBACK GENERATOR
POWER AMPLIFIER
THERMAL PROTECTION
GND
7440-A LM358N
7440-B LM358N
7450-A LM393D
7450-B LM393D
7480 STP3NB60
7613 TL431CZ
7483 TCET1102
7482 TCDT1102G
+13V-LOT
-15V-LOT
+141V
+8V-S
GND-SUP
1625
1627
A33 500mV / div DC 2ms / div
A34 500mV / div DC 2ms / div
A35 500mV / div DC 2ms / div
A36 200mV / div DC 10us / div
A37 500mV / div DC 2ms / div
A38 200mV / div DC 10us / div
A39 2V / div DC 10us / div
A40 2 V / div AC 5ms / div
A41 2 V / div AC 5ms / div
A42 10 V / div AC 5ms / div
A43 10V / div DC 2ms / div
A44 200mV / div DC 2ms / div
A45 1V / div DC 10µs / div
A46 500mV / div DC 10µs / div
A47 50V / div DC 10µs / div
A48 500mV / div DC 10µs / div
A B C D E F G H
1 2 3 4 5 6 7 8 9 10 11 12 13

NOTE BRIDGECOIL PROTECTION (5422) IS TRIGGERED VIA EW (SEE DIAGRAM A3 ALSO)

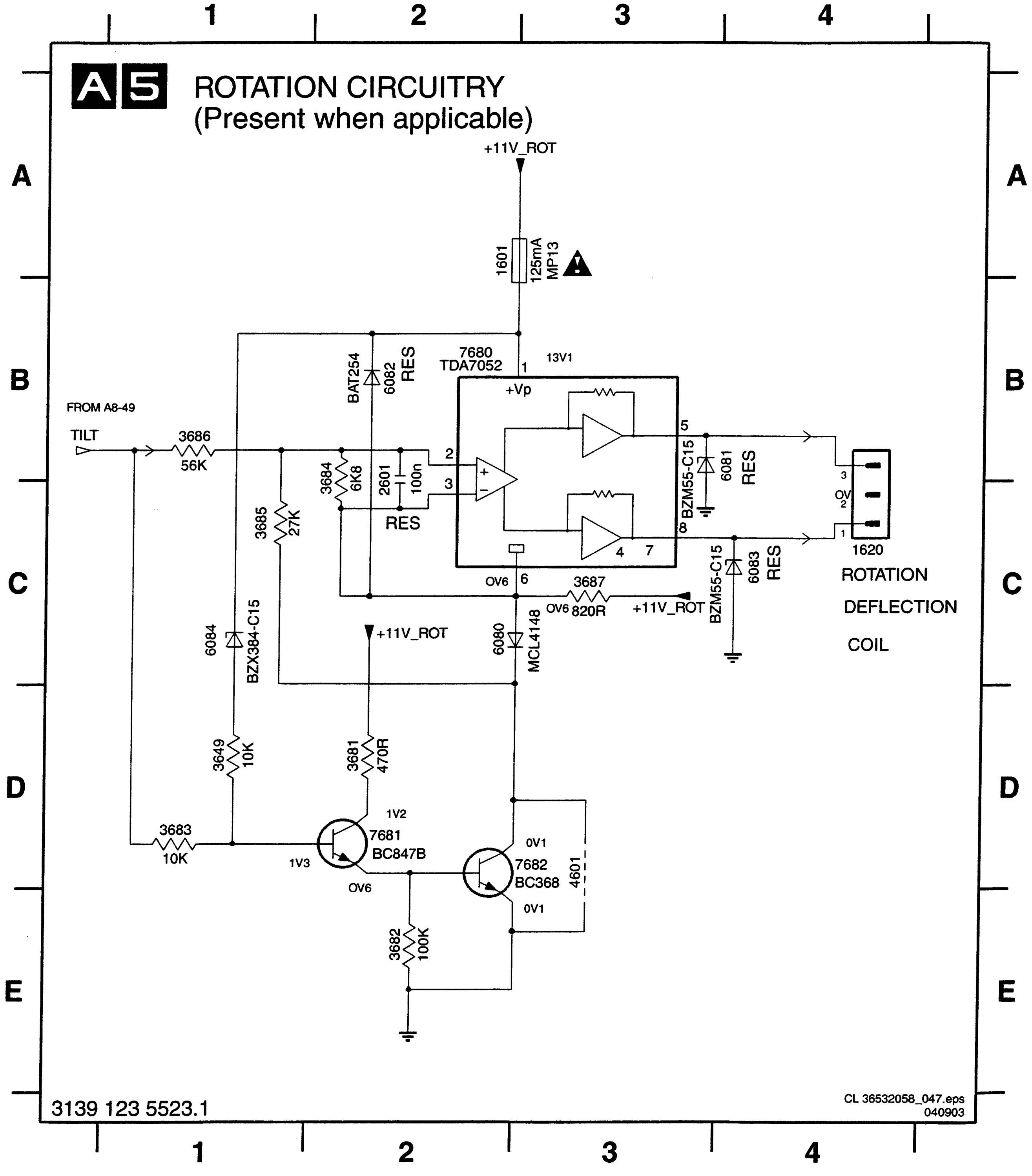
3139 123 5523.1

CL 36532058_046.eps
040903

Item	28/32" WSRF LGPD	34/36" 4:3 RF TOSJ	29" 4:3 RF SMGK	28" 4:3 SF PHCO	36" WSRF MEC	32RF 4X3 NA LGPD	27RF 4X3 NA SAM	30WSRF NA LGPD	34 4:3RF AP LGPD	32WSRF LGPD MKII	29RF EU LGPD	36WSRF_LGPD	DESCRIPTION
1625	V	V	V	V	---	V	V	V	V	V	V	---	CON V 3P M 2.50 BK EH-A B
1627	---	---	---	---	V	---	---	---	---	---	---	V	CON V 3P M 2.50 BK EH-A B
2490	V	V	V	V	---	---	---	---	---	V	V	---	ELCAP 10V S 100U PM20 COL A
2490	---	---	---	---	V	V	V	V	V	---	---	V	ELCAP 50V S 100U PM20 COL A
2498	V	V	V	V	---	---	---	---	---	V	V	---	CER2 0805 X7R 16V 1U PM10 R
2633	V	V	V	V	---	V	V	V	V	V	V	---	CER2 0603 X7R 50V 3N3 COL
2633	---	---	---	---	V	---	---	---	---	---	---	V	CER2 0603 X7R 50V 6N8 COL
2653	---	---	V	---	---	---	---	---	---	---	V	---	CER2 0603 X7R 50V 2N7 PM10 R
2653	---	---	---	---	V	V	V	V	V	---	---	V	CER2 0603 X7R 50V 2N2 COL
2653	V	V	---	V	---	---	---	---	---	V	---	---	CER2 0603 X7R 50V 3N3 COL
2661	---	---	---	---	V	---	---	---	---	---	---	V	CER2 0603 X7R 50V 6N8 COL
2662	---	---	---	---	V	V	V	V	V	---	---	V	CER2 0603 X7R 50V 3N3 COL
3403	V	V	V	V	V	V	V	V	V	V	V	V	RST CRB 1/6W A 100R PM5 COL A
3412	V	V	V	V	V	V	V	V	V	V	V	V	RST SM 0603 1K2 PM5 COL
3418	---	---	---	---	V	---	---	---	---	---	---	V	RST MFLM MBB0207 A 47K PM1 A
3418	V	V	V	V	---	V	V	V	V	V	V	---	RST MFLM MBB0207 A 56K PM1 A
3480	V	---	---	V	V	---	---	V	---	V	---	V	RST FUSE NFR25 S 4R7 PM5 A
3480	---	V	V	---	---	V	V	---	V	---	V	---	RST FUSE NFR25 S 6R8 PM5 A
3483	V	---	V	V	V	---	V	V	---	V	V	V	RST SM 0603 1K8 PM5 COL
3483	---	V	---	---	---	V	---	---	V	---	---	---	RST SM 0603 2K2 PM5 COL
3484	---	---	---	---	V	V	V	V	V	---	---	V	RST SM 0603 4K7 PM5 COL
3488	V	---	V	V	V	---	V	V	---	V	V	V	RST MFLM MBB0207 A 1M PM1 A
3491	---	---	---	---	---	V	V	V	V	---	---	---	RST SM 0603 27K PM5 COL
3491	---	---	---	---	V	---	---	---	---	---	---	V	RST SM 0603 39K PM5 COL
3491	V	V	V	V	---	---	---	---	---	V	V	---	RST SM 0603 47K PM5 COL
3493	V	V	V	V	---	---	---	---	---	V	V	---	RST MFLM MBB0207 A 150K PM1 A
3495	V	V	V	V	---	---	---	---	---	V	V	---	RST MFLM MBB0207 A 15K PM1 A
3620	V	---	---	---	---	---	---	---	---	V	---	---	RST CRB CFR25S A 1R8 PM5 A
3620	---	---	---	V	V	---	---	---	---	---	---	V	RST CRB CFR25S A 1R5 PM5 A
3620	---	V	---	---	---	---	---	V	---	---	---	---	RST CRB CFR25S A 1R2 PM5 A
3620	---	---	V	---	---	V	V	---	V	---	V	---	RST CRB 1/6W A 1R PM5 COL A
3621	---	---	---	---	V	---	---	V	---	---	---	V	RST CRB CFR25S A 1R5 PM5 A
3621	---	V	---	---	---	---	---	---	V	---	---	---	RST CRB CFR25S A 1R2 PM5 A
3621	V	---	V	V	---	V	V	---	---	V	V	---	RST CRB 1/6W A 1R PM5 COL A
3622	V	---	---	---	---	---	---	---	---	---	---	---	RST CRB ERDS2T A 3R3 PM5 A
3622	---	---	---	V	V	---	---	V	---	---	---	V	RST CRB CFR25S A 1R5 PM5 A
3622	---	V	V	---	---	---	---	---	---	---	---	---	RST CRB CFR25S A 1R2 PM5 A
3622	---	---	---	---	---	---	V	---	---	---	---	---	RST CRB 1/6W A 1R PM5 COL A
3622	---	---	---	---	---	V	---	---	V	V	---	---	RST CRB 1/6W A 2R2 PM5 COL A
3623	V	V	V	V	V	V	---	V	V	V	V	V	RST CRB 1/6W A 18K PM5 COL A
3623	---	---	---	---	---	---	V	---	---	---	---	---	RST CRB 1/6W A 22K PM5 COL A
3625	---	---	V	---	---	V	V	---	V	---	V	---	RST CRB 1/6W A 120R PM5 COL A
3625	---	---	---	---	V	---	---	V	---	---	---	V	RST CRB 1/6W A 220R PM5 COL A
3625	V	V	---	V	---	---	---	---	---	V	---	---	RST CRB 1/6W A 330R PM5 COL A
3626	---	---	V	---	---	V	V	---	V	---	V	---	RST CRB 1/6W A 100R PM5 COL A
3626	---	---	---	---	V	---	---	V	---	---	---	V	RST CRB 1/6W A 220R PM5 COL A
3626	V	V	---	V	---	---	---	---	---	V	---	---	RST CRB 1/6W A 330R PM5 COL A
3627	---	---	---	---	V	V	V	V	V	---	---	V	RST SM 0805 10K PM5 COL R
3627	V	V	V	V	---	---	---	---	---	V	V	---	RST SM 0805 22K PM5 COL R
3630	---	---	---	---	---	V	---	---	V	---	---	---	RST SM 0603 27K PM5 COL
3630	V	V	V	V	V	---	V	V	---	V	V	V	RST SM 0603 33K PM5 COL
3632	---	---	---	---	V	---	---	---	---	---	---	V	RST SM 0603 18K PM5 COL
3632	---	---	---	---	---	V	---	---	V	---	---	---	RST SM 0603 33K PM5 COL
3632	V	V	V	V	---	---	V	V	---	V	V	---	RST SM 0603 39K PM5 COL

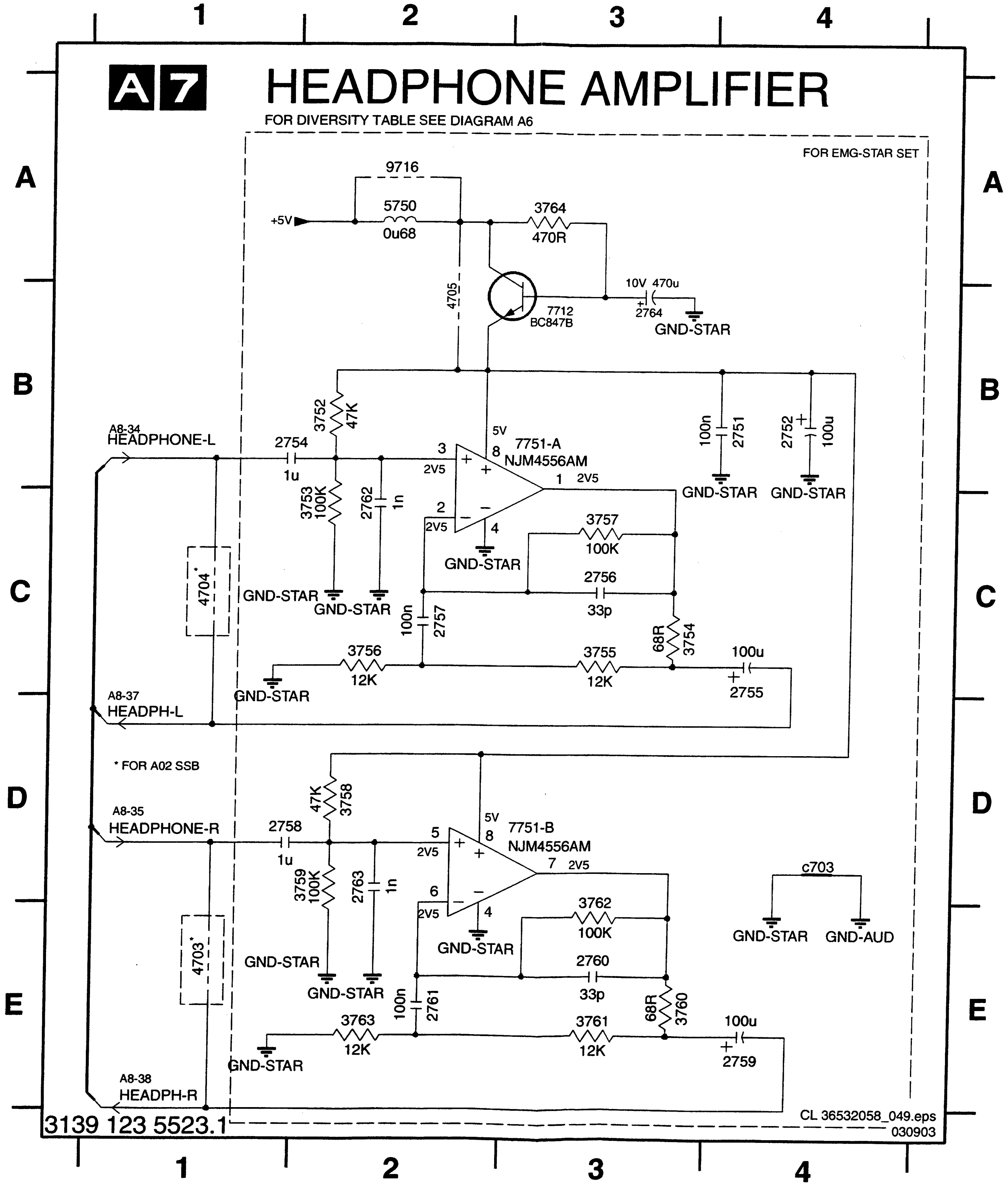
Large Signal Panel: Rotation Circuitry

1601 A2
1620 C4
2601 B2
3649 D1
3681 D2
3682 E2
3683 D1
3684 B2
3685 C1
3686 B1
3687 C3
4601 D3
6080 C2
6081 B3
6082 B2
6083 C4
6084 C1
7680 B2
7681 D2
7682 D3

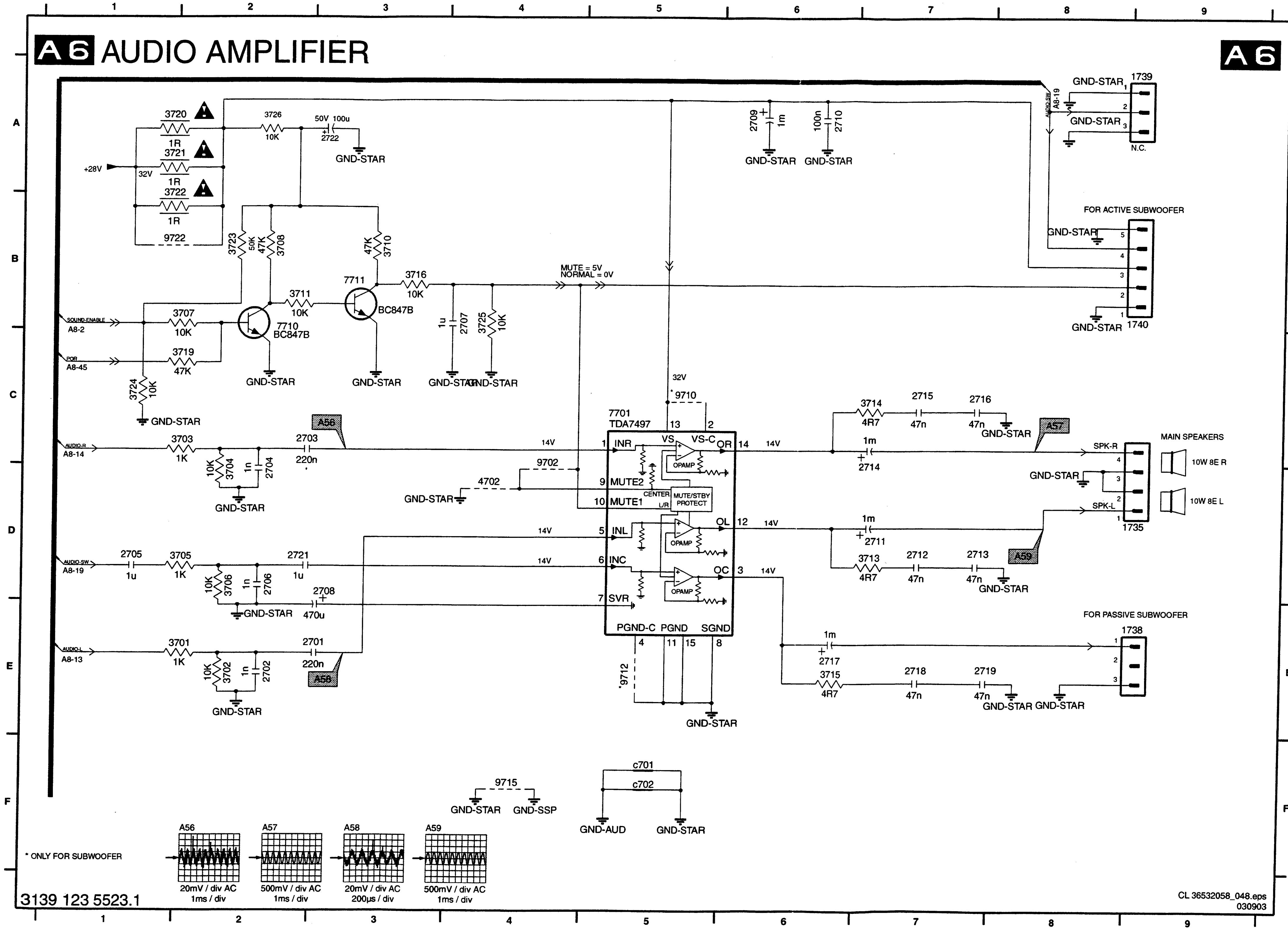

1
2
3
4
A
B
C
D
E
A5
ROTATION CIRCUITRY
(Present when applicable)
+11V_ROT
1601
125mA
MP13
BAT254
6082
RES
7680
TDA7052
13V1
+Vp
FROM A8-49
TILT
3686
56K
3684
6K8
2601
100n
RES
3685
27K
BZM55-C15
6081
RES
1620
ROTATION
DEFLECTION
COIL
0V6
3687
820R
+11V_ROT
6083
6080
MCL4148
6084
BZX384-C15
3649
10K
3681
470R
1V2
3683
10K
7681
BC847B
1V3
0V6
7682
BC368
0V1
4601
3682
100K
3139 123 5523.1
CL 36532058_047.eps
040903

Large Signal Panel: Headphone Amplifier

2751 B4
2752 B4
2754 B1
2755 C4
2756 C3
2757 C2
2758 D1
2759 E4
2760 E3
2761 E2
2762 C2
2763 D2
2764 B3
3752 B2
3753 C2
3754 C3
3755 C3
3756 C2
3757 C3
3758 D2
3759 D2
3760 E3
3761 E3
3762 E3
3763 E2
3764 A3
4703 E1
4704 C1
4705 B2
5750 A2
7712 B3
7751-A B3
7751-B D3
9716 A2
c703 D4


1
2
3
4
A
B
C
D
E
A7
HEADPHONE AMPLIFIER
FOR DIVERSITY TABLE SEE DIAGRAM A6
FOR EMG-STAR SET
9716
5750
0u68
+5V
3764
470R
4705
7712
BC847B
10V 470u
2764
GND-STAR
3752
47K
A8-34
HEADPHONE-L
2754
1u
5V
7751-A
NJM4556AM
2V5
3753
100K
2762
1n
3757
100K
2756
33p
100n
2751
2752
100u
4704*
GND-STAR
2757
3756
12K
3755
12K
68R
3754
100u
2755
A8-37
HEADPH-L
* FOR A02 SSB
3758
47K
A8-35
HEADPHONE-R
2758
7751-B
NJM4556AM
3759
100K
2763
1n
3762
100K
2760
33p
c703
GND-STAR
GND-AUD
4703*
2761
3763
12K
3761
12K
68R
3760
100u
2759
A8-38
HEADPH-R
3139 123 5523.1
CL 36532058_049.eps
030903

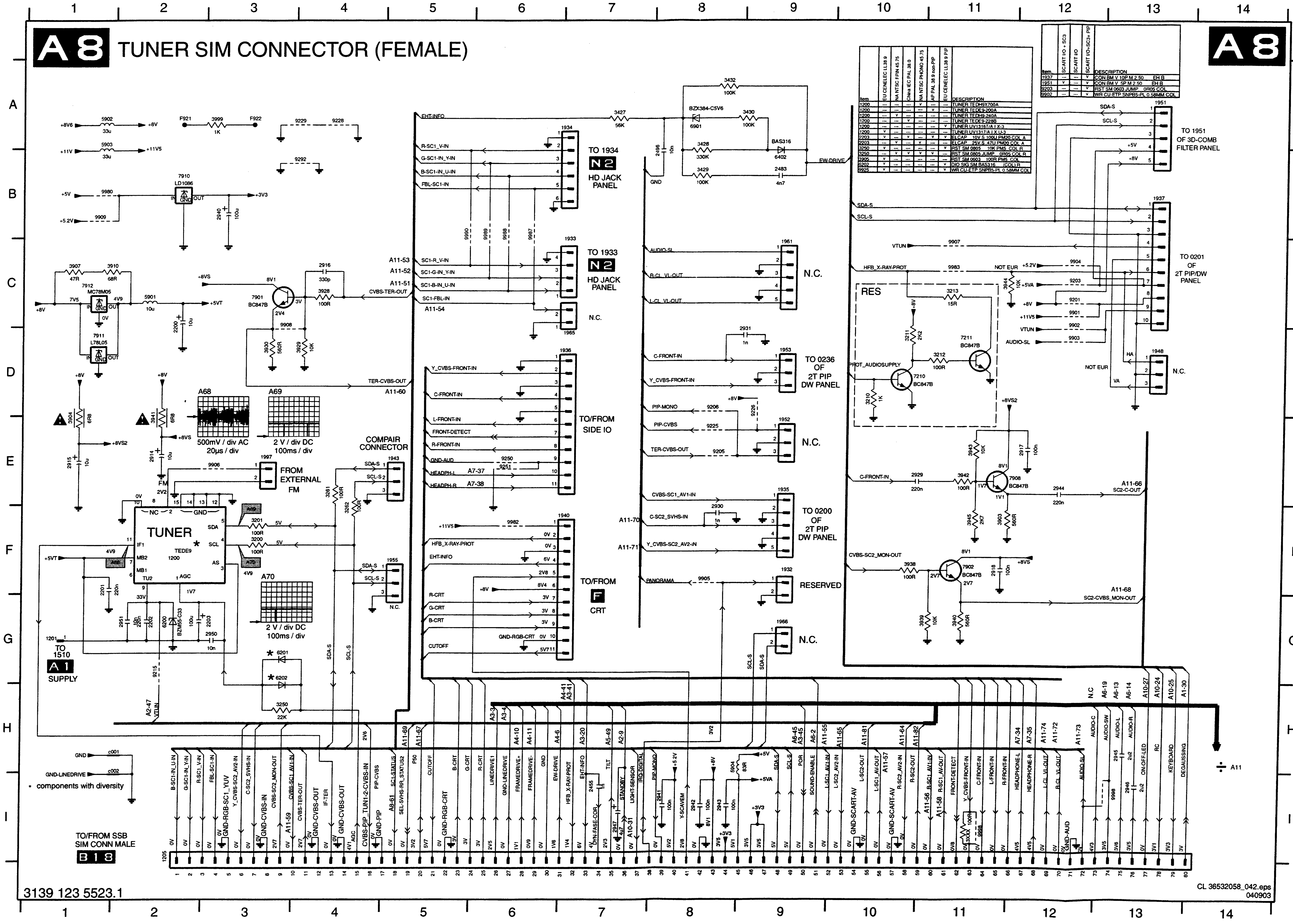
Large Signal Panel: Audio Amplifier


A6 AUDIO AMPLIFIER
A6
1 2 3 4 5 6 7 8 9
A B C D E F
+28V
32V
3720
1R
3721
1R
3722
1R
9722
3726
10K
50V 100u
2722
GND-STAR
2709
1m
100n
2710
3723
50K
47K
3708
47K
3710
7711
3716
10K
3711
10K
BC847B
3707
10K
7710
BC847B
3719
47K
SOUND-ENABLE
A8-2
POR
A8-45
3724
10K
MUTE = 5V
NORMAL = 0V
1u
2707
3725
10K
32V
*9710
7701
TDA7497
13
2
VS
VS-C
OR
14
14V
1 INR
9702
9 MUTE2
4702
10 MUTE1
CENTER
L/R
MUTE/STBY PROTECT
OPAMP
5 INL
OL
12
6 INC
OC
3
7 SVR
PGND-C PGND SGND
4 11 15 8
*9712
AUDIO-R
A8-14
3703
1K
10K
3704
1n
2704
2703
220n
A56
AUDIO-SW
A8-19
2705
1u
3705
1K
10K
3706
1n
2706
2721
1u
2708
470u
AUDIO-L
A8-13
3701
1K
10K
3702
1n
2702
2701
220n
A58
3714
4R7
2715
47n
2716
47n
A57
1m
2714
2711
3713
4R7
2712
47n
2713
47n
A59
GND-STAR
1739
A8-19
AUDIO-SW
N.C.
FOR ACTIVE SUBWOOFER
1740
MAIN SPEAKERS
SPK-R
SPK-L
10W 8E R
10W 8E L
1735
FOR PASSIVE SUBWOOFER
1738
1m
2717
3715
4R7
2718
47n
2719
47n
9715
GND-SSP
c701
c702
GND-AUD
* ONLY FOR SUBWOOFER
A56
A57
A58
A59
20mV / div AC
1ms / div
500mV / div AC
1ms / div
20mV / div AC
200µs / div
500mV / div AC
1ms / div
3139 123 5523.1
CL 36532058_048.eps
030903

1735	D8
1738	E8
1739	A8
1740	B8
2701	E3
2702	E2
2703	C2
2704	D2
2705	D1
2706	D2
2707	B4
2708	D3
2709	A6
2710	A6
2711	D7
2712	D7
2713	D7
2714	C7
2715	C7
2716	C7
2717	E6
2718	E7
2719	E7
2721	D2
2722	A3
3701	E2
3702	E2
3703	C2
3704	D2
3705	D2
3706	D2
3707	B2
3708	B2
3710	B3
3711	B2
3713	D7
3714	C7
3715	E6
3716	B3
3719	C2
3720	A1
3721	A1
3722	B1
3723	B2
3724	C1
3725	B4
3726	A2
4702	D4
7701	C5
7710	C2
7711	B3
9702	D4
9710	C5
9712	E5
9715	F4
9722	B1
c701	F5
c702	F5

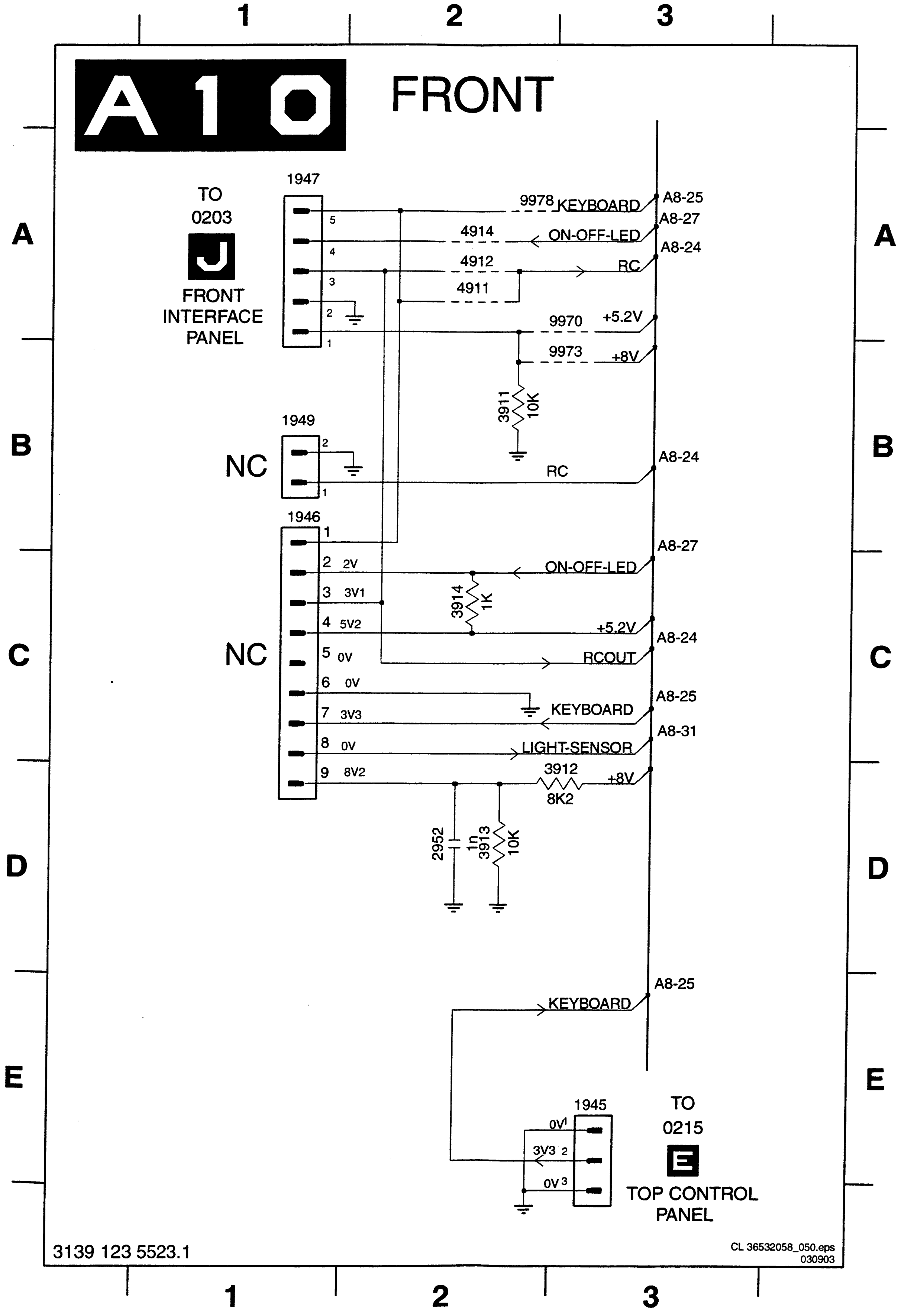
Item	2x10W w/o HP Amp	3x10W w/o HP Amp + Subwoofer	2x10W with EXT Subwoofer	3x10W with HP amp + Subwoofer	2x10W with HP Amp	DESCRIPTION
1738	---	V	---	V	---	CON BM V 3P M 2.50 EH B
1739	---	---	V	---	---	CON BM V 3P M 2.50 EH B
2701	V	---	V	---	V	CER2 0805 Y5V 16V 1U COL R
2701	---	V	---	V	---	CER2 0603 X7R 16V 100N COL
2702	V	V	V	V	V	CER1 0603 NP0 25V 1N COL
2703	V	---	V	---	V	CER2 0805 Y5V 16V 1U COL R
2703	---	V	---	V	---	CER2 0603 X7R 16V 100N COL
2704	V	V	V	V	V	CER1 0603 NP0 25V 1N COL
2705	---	V	---	V	---	CER2 0805 Y5V 16V 1U COL R
2706	---	V	---	V	---	CER2 0603 X7R 50V 3N3 COL
2711	V	---	V	---	V	ELCAP 25V S 1000U PM20 COL B
2711	---	V	---	V	---	ELCAP 25V S 470U PM20 COL B
2714	V	---	V	---	V	ELCAP 25V S 1000U PM20 COL B
2714	---	V	---	---	---	ELCAP 25V S 470U PM20 COL B
2715	V	V	V	V	V	CER2 0603 X7R 16V 47N COL
2716	V	V	V	V	V	CER2 0603 X7R 16V 47N COL
2717	---	V	---	V	---	ELCAP 25V S 1000U PM20 COL B
2718	---	V	---	V	---	CER2 0603 X7R 16V 47N COL
2719	---	V	---	V	---	CER2 0603 X7R 16V 47N COL
2721	---	---	---	V	---	CER2 0603 X7R 10V 220N COL
2721	---	V	---	---	---	CER2 0603 Y5V 10V 470N COL
2751	---	---	---	V	V	CER2 0805 Y5V 50V 100N P8020 R
2752	---	---	---	V	V	ELCAP 25V S 100U PM20 COL A
2753	---	---	---	V	V	CER2 0805 Y5V 50V 100N P8020 R
2754	---	---	---	V	V	CER2 0805 Y5V 16V 1U COL R
2755	---	---	---	V	V	ELCAP 25V S 100U PM20 COL A
2756	---	---	---	V	V	CER1 0603 NP0 50V 33P COL
2757	---	---	---	V	V	CER2 0603 X7R 16V 100N COL
2758	---	---	---	V	V	CER2 0805 Y5V 16V 1U COL R
2759	---	---	---	V	V	ELCAP 25V S 100U PM20 COL A
2760	---	---	---	V	V	CER1 0603 NP0 50V 33P COL
2761	---	---	---	V	V	CER2 0603 X7R 16V 100N COL
2762	---	---	---	V	V	CER1 0603 NP0 25V 1N COL
2763	---	---	---	V	V	CER1 0603 NP0 25V 1N COL
2764	---	---	---	V	V	ELCAP 10V S 470U PM20 COL A
3703	V	V	V	V	---	RST SM 0603 10K PM5 COL
3703	---	---	---	---	V	RST SM 0603 18K PM5 COL
3704	V	V	V	V	---	RST SM 0603 22K PM5 COL
3704	---	---	---	---	V	RST SM 0805 10K PM5 COL R
3705	---	V	---	V	---	RST SM 0603 10K PM5 COL
3706	---	V	---	---	---	RST SM 0603 22K PM5 COL
3706	---	---	---	---	V	RST SM 0805 10K PM5 COL R
3706	---	---	---	V	---	RST SM 0805 22K PM5 COL R
3715	---	V	---	V	---	RST SM 0603 RC21 8R2 PM5 R
3722	---	V	---	V	---	RST FUSE NFR25 S 1R PM5 A
3751	---	---	---	V	V	RST SM 0603 22K PM5 COL
3752	---	---	---	V	V	RST SM 0603 47K PM5 COL
3753	---	---	---	V	V	RST SM 0603 47K PM5 COL
3754	---	---	---	V	V	RST CRB CFR25S A 3R9 PM5 A
3755	---	---	---	V	V	RST SM 0603 12K PM5 COL
3756	---	---	---	V	V	RST SM 0603 12K PM5 COL
3757	---	---	---	V	V	RST SM 0603 100K PM5 COL

Large Signal Panel: Tuner SIMM Connector (Female)


A8
TUNER SIM CONNECTOR (FEMALE)
TO 1934
N2
HD JACK PANEL
TO 1933
N2
HD JACK PANEL
N.C.
TO/FROM SIDE IO
TO/FROM
F
CRT
COMPAIR CONNECTOR
FROM EXTERNAL FM
TUNER
TEDE9
1200
TO 1510
A1
SUPPLY
TO 1951 OF 3D-COMB FILTER PANEL
TO 0201 OF 2T PIP/DW PANEL
TO 0236 OF 2T PIP DW PANEL
TO 0200 OF 2T PIP DW PANEL
RESERVED
RES
A68
A69
A70
500mV / div AC
20µs / div
2 V / div DC
100ms / div
2 V / div DC
100ms / div
TO/FROM SSB SIM CONN MALE
B18
* components with diversity
A11
3139 123 5523.1
CL 36532058_042.eps
040903

Item	Location
1200	F2
1201	G1
1205	I2
1932	F9
1933	B6
1934	A6
1935	E9
1936	D6
1937	B13
1940	F6
1943	E5
1948	D13
1951	A13
1952	E9
1953	D9
1955	F5
1961	C9
1965	D6
1966	G9
1997	E3
2200	D2
2201	F1
2202	G2
2203	G3
2455	I7
2483	B9
2496	B8
2914	E2
2915	E1
2916	C4
2917	E12
2918	F11
2929	E10
2930	F8
2931	D9
2940	B3
2941	I8
2942	I8
2943	I8
2944	E12
2945	H13
2946	I13
2947	I7
2950	G3
2951	G2
3200	F3
3201	F3
3210	D10
3211	D10
3212	D11
3213	C11
3250	H3
3261	E4
3262	F4
3427	A7
3428	A8
3429	B8
3430	A9
3432	A8
3903	F11
3904	E1
3905	I11
3907	C1
3910	C1
3928	C4
3929	D4
3930	D3
3938	F10
3939	G11
3940	G11
3941	E2
3942	E11
3943	E11
3944	C11
3945	F11
3999	A3
4915	I11
5901	C2
5902	A1
5903	A1
5904	H8
6200	G2
6201	G3
6202	G3
6402	B9
6901	A8
7210	D10
7211	D11
7901	C3
7902	F11
7908	E11
7910	B2
7911	D1
7912	C1
9201	C12
9203	C12
9205	E8
9206	D8
9215	G2
9225	E8
9226	D9
9228	A4
9229	A4
9250	E6
9251	E6
9292	B4
9901	C12
9902	C12
9903	D12
9904	C12
9905	F8
9906	E3
9907	C11
9908	C3
9909	B1
9980	B1
9982	F6
9983	C11
9987	B6
9988	B6
9989	B6
9990	B5
9998	I13
c001	H2
c002	I2

Large Signal Panel: Front

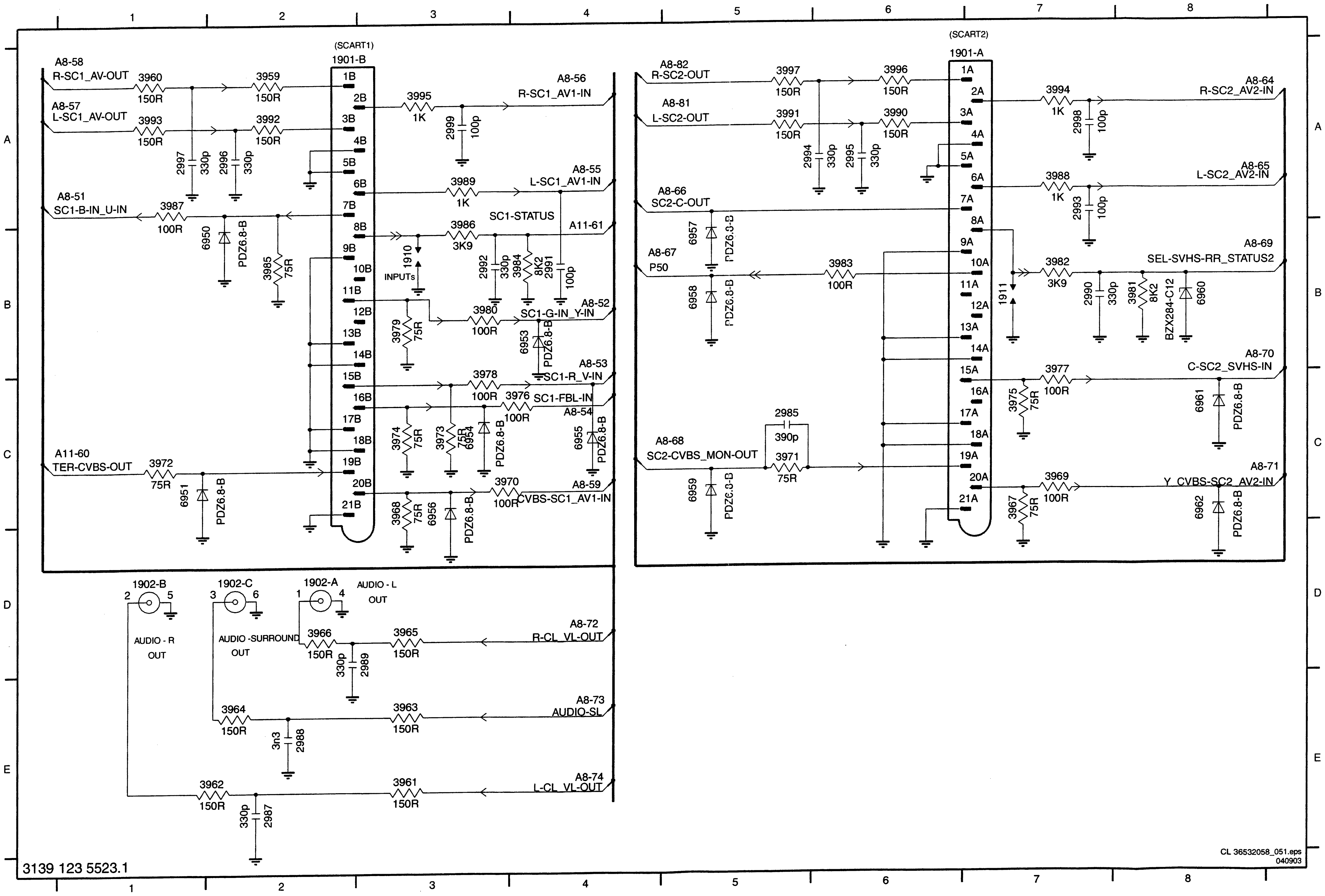

1
2
3
A
B
C
D
E
A10
FRONT
TO
0203
J
FRONT
INTERFACE
PANEL
1947
5
4
3
2
1
9978
KEYBOARD
A8-25
4914
ON-OFF-LED
A8-27
4912
RC
A8-24
4911
9970
+5.2V
9973
+8V
3911
10K
1949
NC
2
1
RC
A8-24
1946
1
2 2V
ON-OFF-LED
A8-27
3 3V1
3914
1K
4 5V2
+5.2V
A8-24
5 0V
RCOUT
NC
6 0V
A8-25
7 3V3
KEYBOARD
A8-31
8 0V
LIGHT-SENSOR
9 8V2
3912
8K2
+8V
2952
1n
3913
10K
A8-25
KEYBOARD
1945
0V 1
3V3 2
0V 3
TO
0215
E
TOP CONTROL
PANEL
3139 123 5523.1
CL 36532058_050.eps
030903

1945	E3
1946	B1
1947	A1
1949	B1
2952	D2
3911	B2
3912	D3
3913	D2
3914	C2
4911	A2
4912	A2
4914	A2
9970	A3
9973	B3
9978	A2

Personal Notes:

Large Signal Panel: Inputs/Outputs

A11 INPUTS/OUTPUTS


1
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7
8
A
B
C
D
E
(SCART1)
1901-B
(SCART2)
1901-A
A8-58
R-SC1_AV-OUT
3960
150R
3959
150R
A8-57
L-SC1_AV-OUT
3993
150R
3992
150R
2997
330p
2996
330p
A8-56
R-SC1_AV1-IN
3995
1K
2999
100p
A8-55
L-SC1_AV1-IN
3989
1K
A8-51
SC1-B-IN_U-IN
3987
100R
6950
PDZ6.8-B
3985
75R
SC1-STATUS
A11-61
3986
3K9
1910
INPUTs
2992
330p
3984
8K2
2991
100p
A8-52
SC1-G-IN_Y-IN
3980
100R
3979
75R
6953
PDZ6.8-B
A8-53
SC1-R_V-IN
3978
100R
3976
100R
SC1-FBL-IN
A8-54
3974
75R
3973
75R
6954
PDZ6.8-B
6955
PDZ6.8-B
A11-60
TER-CVBS-OUT
3972
75R
6951
PDZ6.8-B
3970
100R
A8-59
CVBS-SC1_AV1-IN
3968
75R
6956
PDZ6.8-B
1B
2B
3B
4B
5B
6B
7B
8B
9B
10B
11B
12B
13B
14B
15B
16B
17B
18B
19B
20B
21B
A8-82
R-SC2-OUT
3997
150R
3996
150R
A8-81
L-SC2-OUT
3991
150R
3990
150R
2994
330p
2995
330p
A8-64
R-SC2_AV2-IN
3994
1K
2998
100p
A8-65
L-SC2_AV2-IN
3988
1K
2993
100p
A8-66
SC2-C-OUT
6957
PDZ6.8-B
A8-67
P50
6958
PDZ6.8-B
3983
100R
A8-69
SEL-SVHS-RR_STATUS2
3982
3K9
1911
2990
330p
3981
8K2
BZX284-C12
6960
A8-70
C-SC2_SVHS-IN
3977
100R
3975
75R
6961
PDZ6.8-B
2985
390p
A8-68
SC2-CVBS_MON-OUT
3971
75R
6959
PDZ6.8-B
A8-71
Y_CVBS-SC2_AV2-IN
3969
100R
3967
75R
6962
PDZ6.8-B
1A
2A
3A
4A
5A
6A
7A
8A
9A
10A
11A
12A
13A
14A
15A
16A
17A
18A
19A
20A
21A
1902-B
2
5
AUDIO - R
OUT
1902-C
3
6
AUDIO -SURROUND
OUT
1902-A
1
4
AUDIO - L
OUT
3966
150R
2989
330p
3965
150R
A8-72
R-CL_VL-OUT
3964
150R
2988
3n3
3963
150R
A8-73
AUDIO-SL
3962
150R
2987
330p
3961
150R
A8-74
L-CL_VL-OUT
3139 123 5523.1
CL 36532058_051.eps
040903

1901-A	A6
1901-B	A2
1902-A	D2
1902-B	D1
1902-C	D2
1910	B3
1911	B7
2985	C5
2987	E2
2988	E2
2989	D3
2990	B7
2991	B4
2992	B3
2993	A7
2994	A5
2995	A6
2996	A2
2997	A1
2998	A7
2999	A3
3959	A2
3960	A1
3961	E3
3962	E2
3963	E3
3964	E2
3965	D3
3966	D2
3967	C7
3968	C3
3969	C7
3970	C3
3971	C5
3972	C1
3973	C3
3974	C3
3975	C7
3976	C4
3977	C7
3978	C3
3979	B3
3980	B3
3981	B8
3982	B7
3983	B6
3984	B4
3985	B2
3986	B3
3987	A1
3988	A7
3989	A3
3990	A6
3991	A5
3992	A2
3993	A1
3994	A7
3995	A3
3996	A6
3997	A5
6950	B1
6951	C1
6953	B4
6954	C3
6955	C4
6956	C3
6957	B5
6958	B5
6959	C5
6960	B8
6961	C8
6962	C8

Layout LSP (Top Side)

0040	B6
0043	C4
1146	E2
1147	E2
1148	E2
1200	E8
1201	E5
1205	E7
1417	A6
1424	A8
1430	B7
1491	A6
1492	A8
1493	A7
1495	B8
1498	A8
1499	C8
1500	A2
1501	A2
1502	A3
1503	B3
1505	A2
1506	B2
1510	C5
1550	B2
1590	A3
1591	A3
1601	E1
1620	D1
1625	A8
1627	A8
1693	C7
1735	E5
1738	E4
1739	D5
1740	C5
1901	D8
1902	D8
1932	D6
1933	D8
1934	D8
1935	D7
1936	D6
1937	E6
1940	E7
1943	E8
1945	E4
1946	E4
1947	E3
1948	E6
1949	E2
1950	A1
1951	E6
1952	E7
1953	D6
1955	E6
1961	E6
1965	D8
1966	D6
1997	E8
2100	D3
2101	C2
2102	C2
2104	D3
2107	D3
2108	B2
2111	C1
2114	B1
2115	D2
2116	D1
2118	D2
2119	E3
2120	E2
2121	D2
2122	C2
2124	B1
2126	E2
2132	E2
2140	E3
2141	E2
2143	D2
2148	D1
2151	C1
2152	D3
2157	C2
2161	B2
2163	B1
2200	E8
2203	E8
2400	A5
2401	A6
2402	A8
2405	A6
2413	C7
2418	B7
2419	B6
2420	B6
2421	A5
2422	A5
2423	A4
2424	B5
2425	B6
2426	B5
2430	A6
2431	A6
2432	A5
2433	A5
2434	A5
2435	B6
2450	A8
2451	C8
2460	A8
2461	A8
2462	B8
2463	B8
2464	B8
2465	B7
2468	A8
2469	A6
2487	A6
2488	B6
2490	B5
2491	A5
2492	C7
2501	C4
2503	C3
2505	C4
2506	D4
2507	A2
2508	A4
2509	A4
2510	C3
2512	E4
2515	C4
2516	B4
2517	B3
2518	B2
2519	E4
2520	A3
2521	A2
2523	C3
2526	C3
2527	B3
2531	D4
2537	A3
2539	B4
2540	D3
2541	B3
2542	E4
2546	E4
2547	A3
2622	B8
2624	A8
2625	B8
2627	A8
2628	B8
2642	A5
2708	D5
2709	C5
2711	E5
2714	C5
2717	E4
2722	C6
2752	C6
2755	D6
2759	D6
2764	C6
2900	A1
2914	E8
2915	D7
2940	E6
2947	E2
3101	B2
3102	C2
3103	C2
3104	C2
3105	C2
3106	C1
3107	C1
3108	B2
3111	C2
3113	D2
3114	D1
3115	E2
3116	E2
3117	C2
3118	B2
3123	D1
3124	D1
3125	C1
3126	C1
3127	C1
3137	E1
3141	E3
3144	D2
3161	D2
3162	D2
3171	D1
3172	D1
3213	E6
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3401	A6
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3403	A6
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3415	C7
3416	C7
3417	B7
3418	B5
3423	B6
3425	B5
3426	B5
3431	A6
3435	A5
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3449	C7
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3451	A8
3460	A8
3461	A8
3462	B7
3463	B7
3464	B7
3465	B7
3469	A8
3476	A5
3478	B5
3479	B5
3480	B5
3488	B5
3492	C6
3493	B5
3495	A5
3498	B8
3499	B8
3500	A4
3501	A3
3502	C5
3503	C5
3505	C3
3507	D4
3508	C3
3509	A2
3511	C3
3513	B2
3514	C4
3515	C4
3516	B3
3518	B3
3520	D3
3521	A2
3526	C4
3533	D3
3537	A3
3540	D3
3541	C4
3542	D4
3543	C3
3545	C3
3546	C3
3548	B4
3550	B3
3551	B4
3554	B4
3559	B4
3562	A3
3620	B8
3621	B8
3622	B8
3623	B8
3624	A8
3625	B8
3626	B8
3628	C7
3634	B8
3635	B7
3641	C8
3642	B8
3645	A5
3648	B8
3661	B8
3663	B8
3681	E1
3687	E1
3689	A7
3716	C5
3720	C5
3721	C5
3722	C5
3725	C5
3726	C5
3754	D6
3760	D6
3904	D7
3941	E8
3967	D8
3968	D8
3971	D8
3972	D8
3973	D8
3974	D8
3975	D8
3979	D8
3983	D8
3985	D8
3986	C8
3987	C8
3989	C8
3993	C8
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5461	A8
5463	B8
5465	B7
5466	A7
5467	B5
5469	A6
5502	A4
5503	A3
5504	A3
5505	C3
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5507	E4
5511	A4
5512	D4
5514	E4
5515	A3
5516	A4
5517	C3
5518	C4
5520	C3
5620	A8
5621	C8
5750	C6
5901	E7
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5903	E1
5904	E7
6103	C2
6105	C2
6106	B1
6107	D3
6109	B2
6110	D1
6111	D2
6113	D2
6114	C2
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6122	D1
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6148	D2
6400	A7
6405	A6
6408	C7
6421	C6
6422	C6
6423	B6
6434	B5
6435	B5
6460	A8
6462	B8
6463	B8
6464	B7
6465	B7
6480	B6
6505	C3
6510	B3
6514	B4
6515	C4
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6525	B4
6530	C3
6534	C3
6535	E3
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6620	B8
6621	B8
6622	B8
6900	A1
7100	C1
7101	B2
7102	C2
7103	D1
7104	D1
7105	B1
7131	E2
7141	E3
7408	C6
7421	C7
7440	C7
7480	C5
7482	C6
7483	C6
7502	C3
7503	C4
7504	C3
7506	D3
7507	D3
7508	B4
7528	B2
7529	D3
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7620	B8
7680	E1
7682	E1
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7912	E7
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9112	D2
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9126	E3
9127	C2
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9260	E8
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9508	C4
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9517	C3
9518	B3
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9563	C4
9564	B3
9565	A3
9566	C3
9570	D4
9571	C4
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9623	B7
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9655	A8
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9658	B7
9659	A5
9660	A5
9661	A4
9663	A5
9664	B8
9665	B7
9666	B6
9667	B6
9669	C6
9670	B6
9671	A5
9674	A6
9675	A8
9678	A8
9700	C5
9701	D5
9702	D5
9703	D5
9704	C6
9705	D5
9706	D5
9707	D5
9708	C5
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9710	D5
9711	D4
9712	D5
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9714	D4
9715	E5
9716	C6
9717	C6
9718	D4
9719	E5
9722	C5
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9902	E6
9903	E6
9906	E8
9907	E6
9909	E5
9910	D6
9911	D7
9912	D7
9913	D7
9914	D7
9915	D7
9916	D7
9917	D7
9918	C8
9919	D7
9920	D7
9921	D7
9922	D8
9923	D8
9924	D8
9925	D8
9926	D8
9929	E7
9930	E7
9931	E8
9932	E7
9933	D8
9934	E8
9935	E8
9936	E8
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9939	E6
9940	E7
9942	E6
9943	E7
9944	E7
9945	E7
9946	E7
9947	E7
9948	D7
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9953	E5
9954	E6
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9956	E5
9957	A1
9958	A1
9959	E8
9961	D6
9963	E8
9964	E3
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9967	E5
9968	D7
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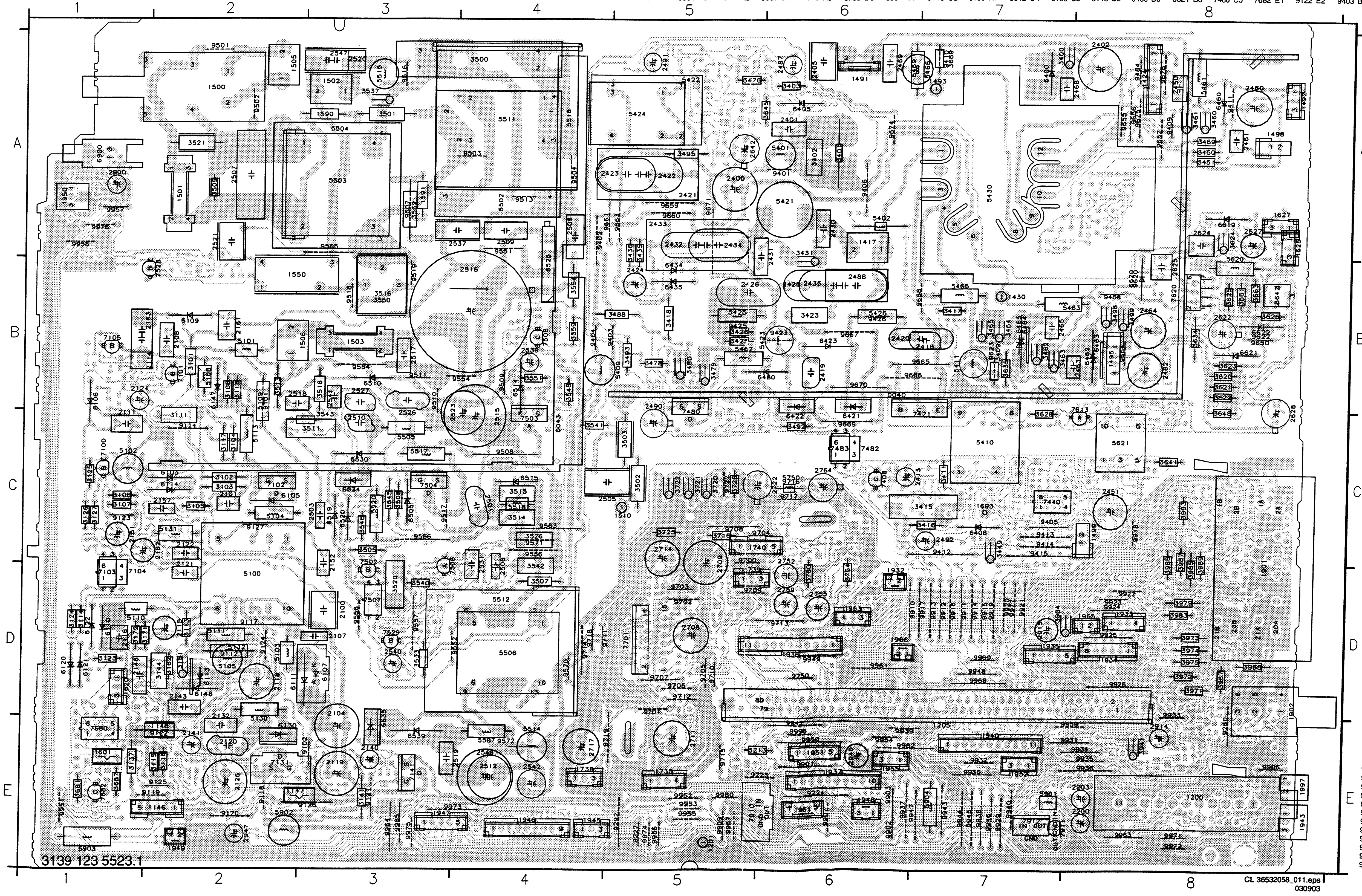
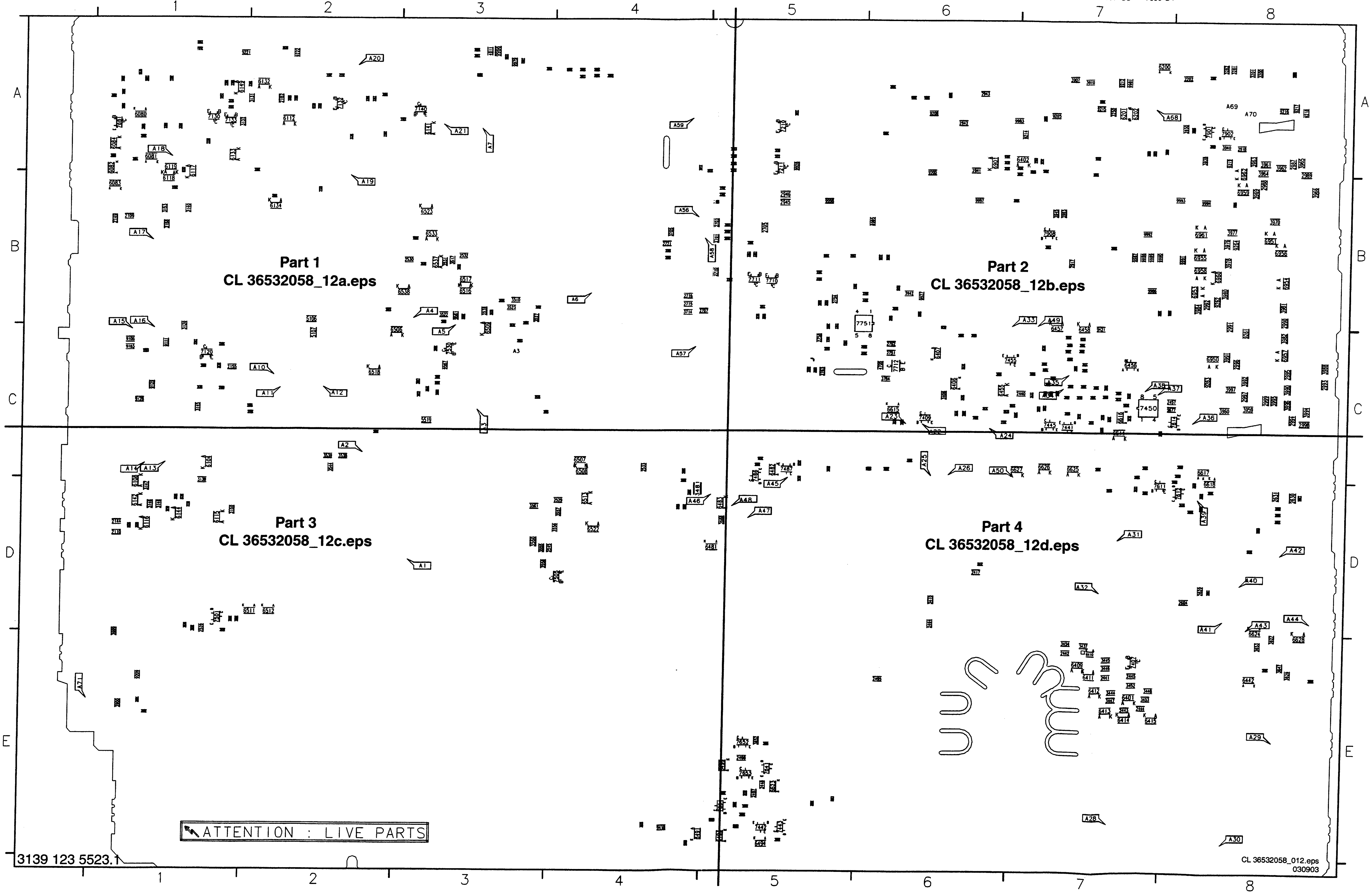
9982	E6
9996	E6

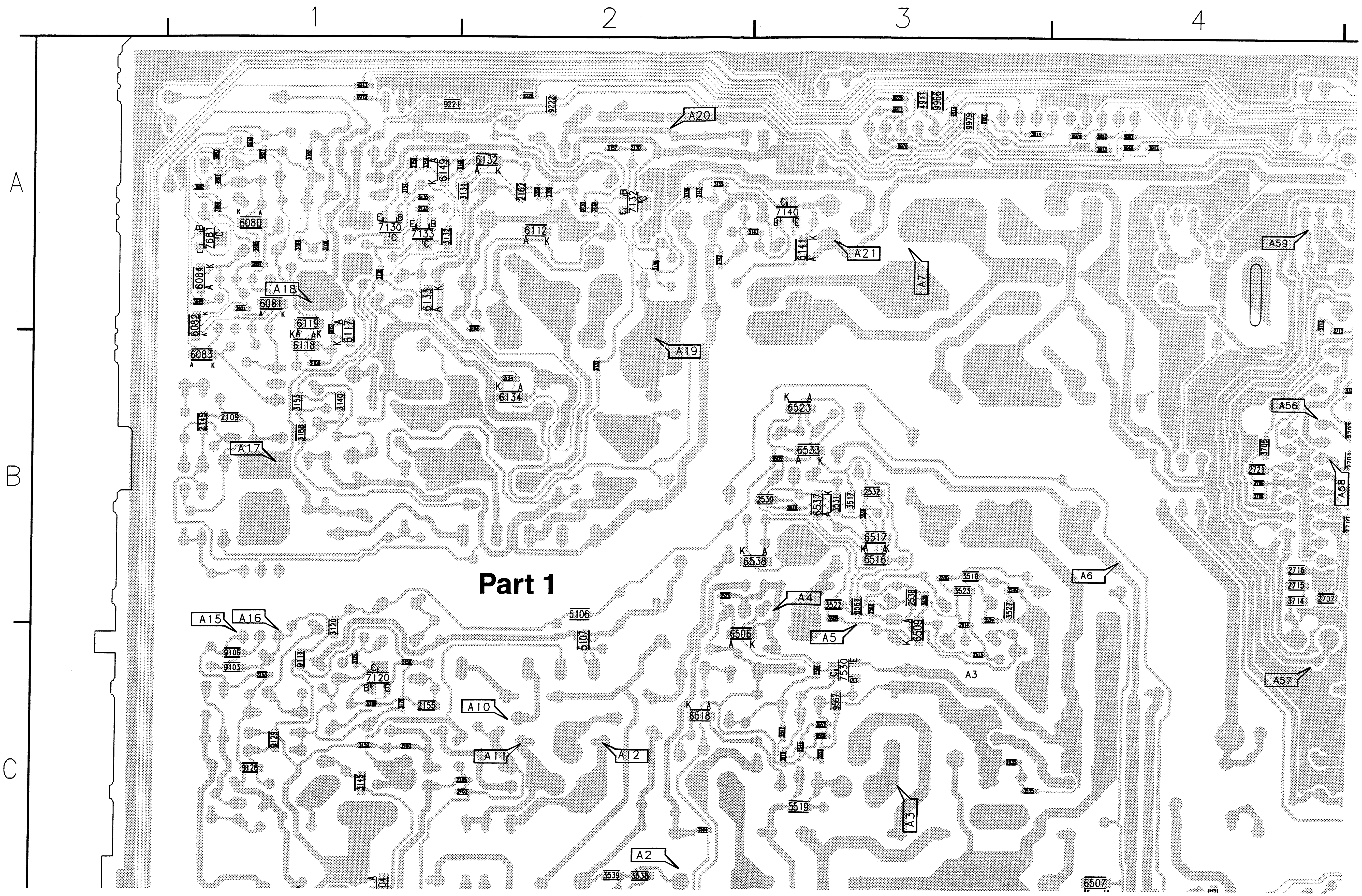


Layout LSP (Overview Bottom Side)

0201 B5	1902 D7	1915 D6	1928 D5	1938 D4	1955 D3	1965 D2	1975 D2	2008 B7	2030 A6	2068 B7	2083 B7	2318 C4	2362 C3	2397 C5	3009 A7	3154 B7	3316 C4	3331 C4	3360 C3	3372 D3	3386 C4	3509 C5	4152 C7	6361 C2	6398 C5	7356 C5
0202 B5	1903 D7	1918 D6	1929 D5	1939 D4	1956 D3	1966 D2	1976 D2	2012 B5	2037 A5	2069 C7	2084 B7	2319 C4	2363 C3	2932 C5	3022 A5	3155 A7	3317 C4	3332 C4	3361 C3	3373 C3	3391 C5	3510 C5	4361 D3	6365 C3	7100 B6	7361 C2
0290 C2	1904 D6	1919 D6	1931 D5	1941 D4	1958 D3	1967 D2	1977 D2	2013 B6	2041 A7	2070 B7	2085 B7	2321 D4	2364 C3	2933 C5	3064 C7	3307 C3	3319 D4	3333 C4	3362 D3	3376 C3	3392 C5	3936 D6	4363 C2	6367 C3	7300 B3	7365 D3
0291 B2	1906 D6	1920 D5	1932 D5	1948 D3	1959 D3	1968 D2	1978 D2	2018 B6	2042 A7	2071 B7	2086 B7	2327 C4	2365 C3	2935 D5	3065 B7	3308 C4	3320 D4	3338 C4	3363 C3	3377 D3	3393 C5	3939 D6	4501 A2	6368 C3	7301 C3	7382 C4
1112 B5	1907 D6	1921 D5	1933 D5	1949 D3	1960 D3	1969 D2	1979 D1	2019 B5	2063 C7	2072 A7	2087 B7	2328 C4	2366 D3	2936 D5	3071 C7	3309 D3	3321 C4	3339 C4	3364 C3	3378 D3	3394 C5	4101 C6	5129 B5	6381 C5	7302 C4	7383 C5
1114 C6	1909 D6	1923 D5	1934 D5	1950 D3	1961 D3	1970 D2	1980 D1	2024 B6	2064 C7	2073 A7	2307 C3	2329 C4	2380 C5	3003 B5	3072 A7	3310 D4	3322 C4	3345 C6	3365 D3	3380 C5	3395 C5	4102 C6	5307 C4	6382 D5	7303 C4	7393 C5
1115 A7	1910 D6	1924 D5	1935 D5	1951 D3	1962 D3	1972 D2	2003 A5	2025 B5	2065 B7	2074 A7	2308 C4	2331 D4	2384 C5	3005 B5	3073 A7	3311 C3	3323 C4	3353 C5	3366 D3	3382 C4	3396 C5	4103 C6	5317 C4	6384 C5	7310 D3	7730 A2
1117 B7	1911 D6	1925 D5	1936 D4	1952 D3	1963 D2	1973 D2	2005 A6	2027 B6	2066 B7	2075 A7	2311 C4	2339 C4	2386 C4	3007 A5	3074 A7	3312 C3	3329 D4	3354 C5	3367 C3	3384 C5	3397 C5	4104 C6	5327 C4	6385 C4	7320 D4	7790 C2
1901 D7	1913 D6	1926 D5	1937 D4	1953 D3	1964 D2	1974 D2	2007 C7	2028 B5	2067 B7	2076 A7	2317 C4	2361 C3	2395 C5	3008 A7	3153 B7	3313 C3	3330 D4	3356 D5	3368 D3	3385 C5	3398 C5	4107 C6	6353 C5	6397 C5	7330 D4	



Layout LSP (Part 1 Bottom Side)


1
2
3
4
A
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C
Part 1
A20
A21
A7
A59
A18
A19
A17
A56
A58
A6
A4
A5
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A57
A15
A16
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A11
A12
A2
9221
9222
6132
6149
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7130
7133
6112
7132
7140
6141
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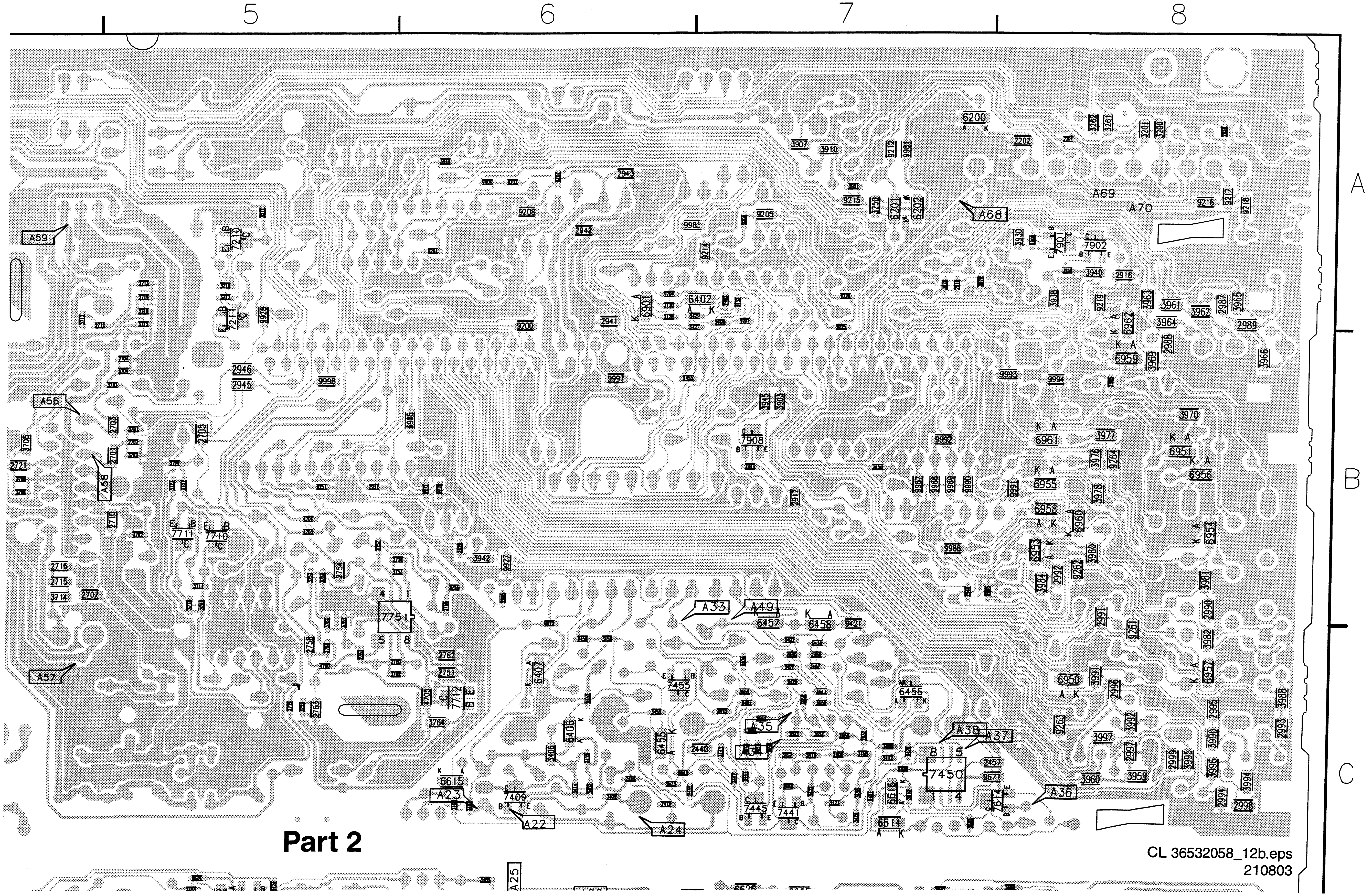
6081
6133
6082
6119
6118
6117
6083
6134
6523
3153
3140
3158
2149
2109
6533
2530
6537
3531
3517
2532
6517
6516
6538
3510
3523
3522
3527
2538
6509
6506
5106
5107
3120
9106
9103
9111
7120
2155
7530
6518
9129
9128
3145
5519
3539
3538
6507
3705
2721
2716
2715
3714
2707

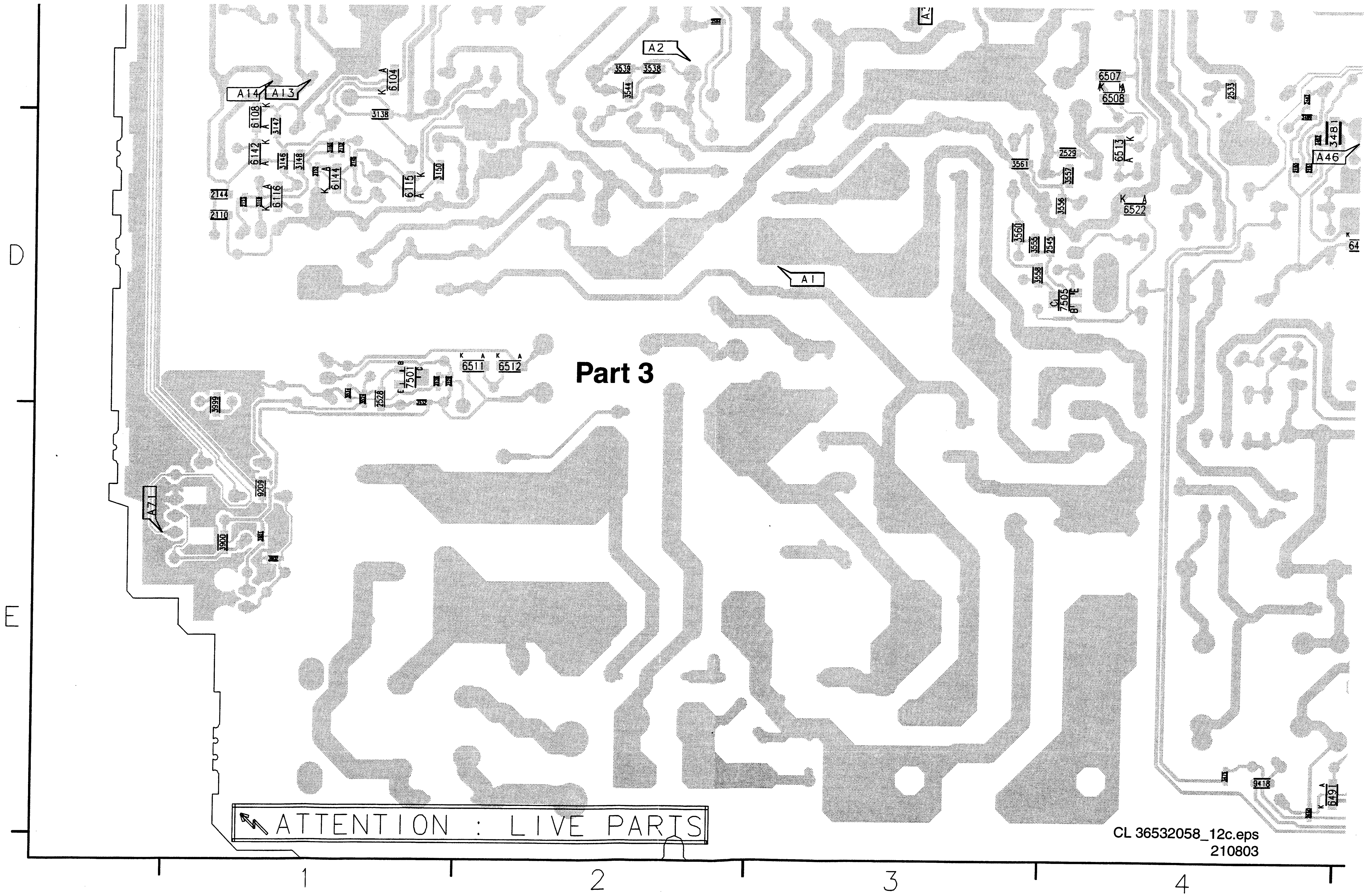
CL 36532058_12a.eps
210803

Layout LSP (Part 2 Bottom Side)


5
6
7
8
A
B
C
Part 2
A59
A56
A57
A58
A68
A69
A70
A33
A49
A35
A38
A37
A36
A22
A23
A24
A25
7751
7450
7712
7409
7445
7441
7455
6456
6457
6458
6402
6901
6200
7901
7902
7908
7210
7211
7711
7710
6950
6961
6955
6958
6960
6951
6956
6954
6957
6959
6962
6615
6614
6616
6407
6406
6455

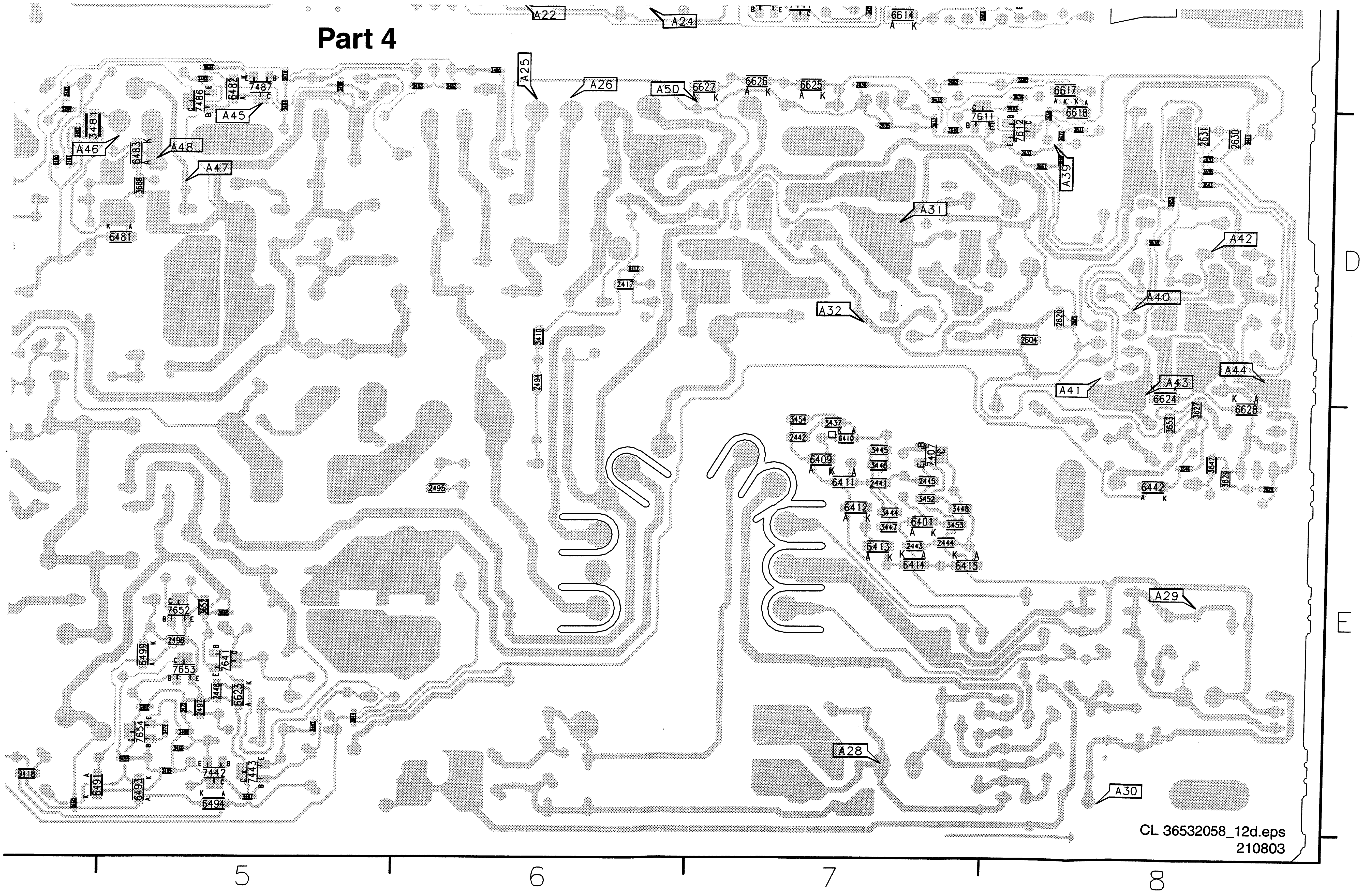
CL 36532058_12b.eps
210803

Layout LSP (Part 3 Bottom Side)


A2
3539
3538
3544
A14
A13
6104
6108
3147
3138
6142
3146
3148
6144
6115
3150
6116
2144
2110
6507
6508
2533
348
A46
2529
3561
3557
6513
3556
6522
3560
3555
2545
3558
7505
A1
64
6511
6512
7501
2528
3999
Part 3
9209
A71
3900
9418
6491
ATTENTION : LIVE PARTS
D
E
1
2
3
4

CL 36532058_12c.eps
210803

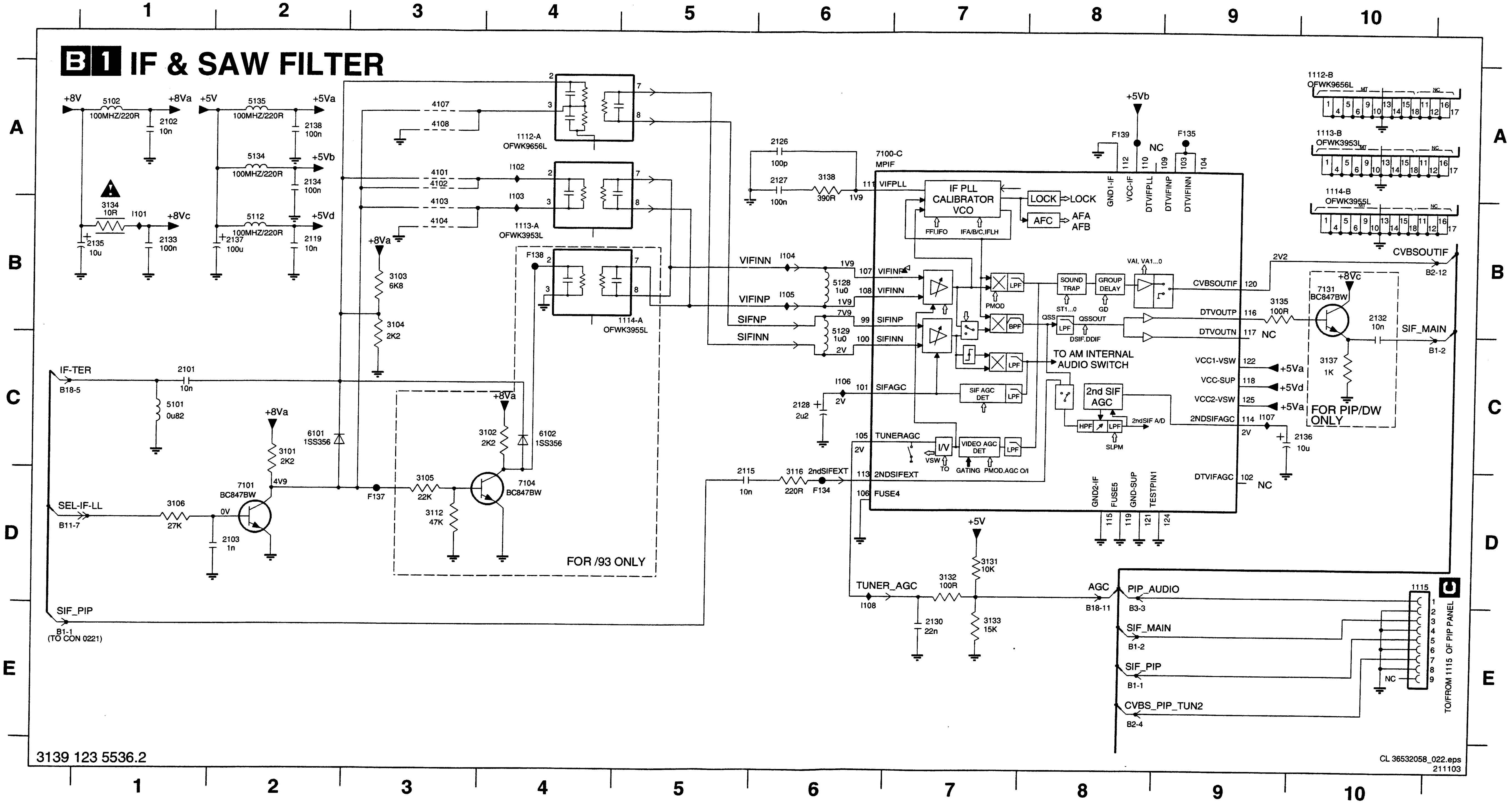
Layout LSP (Part 4 Bottom Side)


Part 4
A22
A24
6614
A25
A26
A50
6627
6626
6625
6617
6618
7611
7612
2631
2630
A39
7486
6482
7487
A45
3481
A46
6483
A48
A47
3688
6481
A31
A42
2417
A40
A32
2620
2604
3410
2494
A41
A43
A44
6624
6628
3627
3653
3454
3437
2442
6410
3445
7407
3446
6409
6411
2441
2445
3452
3448
6412
3444
3447
6401
3453
2443
2444
6413
6414
6415
3647
3629
6442
2495
A29
7652
3652
2498
6499
7653
7641
6623
2497
7654
9418
6491
6493
7442
7443
6494
A28
A30
D
E
5
6
7
8

CL 36532058_12d.eps
210803

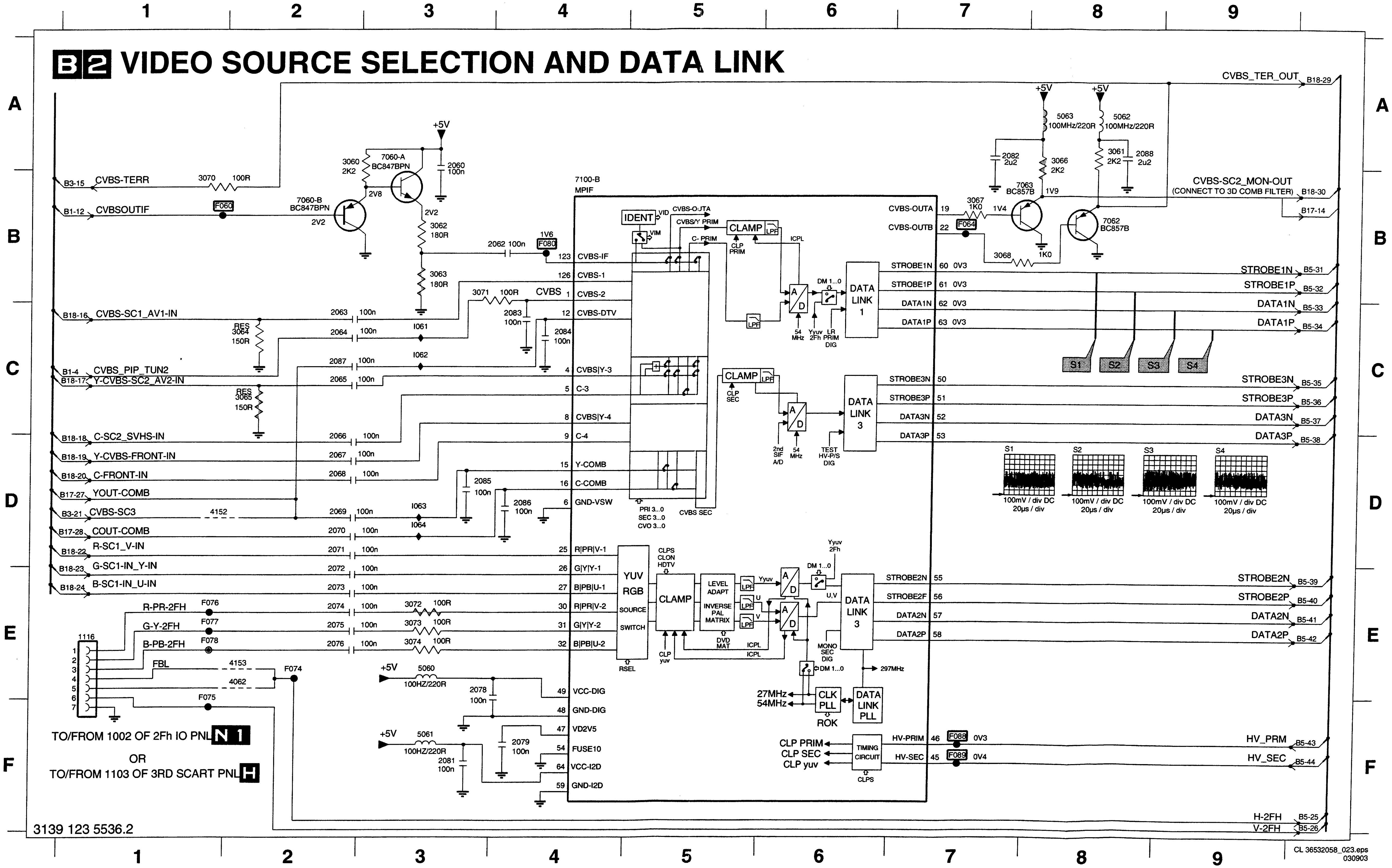
Small Signal Board: If & SAW Filter

1112-A	A4
1112-B	A10
1113-A	B4
1113-B	A10
1114-A	B5
1114-B	A10
1115	D10
2101	C1
2102	A1
2103	D2
2115	D5
2119	B2
2126	A6
2127	A6
2128	C6
2130	E7
2132	B10
2133	B1
2134	A2
2135	B1
2136	C10
2137	B2
2138	A2
3101	C2
3102	C4
3103	B3
3104	B3
3105	D3
3106	D1
3112	D3
3116	D6
3131	D7
3132	D7
3133	E7
3134	B1
3135	B9
3137	C10
3138	A6
4101	A3
4102	A3
4103	B3
4104	B3
4107	A3
4108	A3
5101	C1
5102	A1
5112	B2
5128	B6
5129	B6
5134	A2
5135	A2
6101	C2
6102	C4
7100-C	A6
7101	D2
7104	D4
7131	B10
F114	E10
F115	D10
F116	E10
F132	E10
F134	D6
F135	A9
F137	D3
F138	B4
F139	A8
I101	B1
I102	A4
I103	A4
I104	B6
I105	B6
I106	C6
I107	C9
I108	E6


1
2
3
4
5
6
7
8
9
10
A
B
C
D
E
B1 IF & SAW FILTER
+8V
5102
100MHZ/220R
+8Va
2102
10n
+5V
5135
100MHZ/220R
+5Va
2138
100n
5134
100MHZ/220R
+5Vb
2134
100n
3134
10R
I101
+8Vc
2135
10u
2133
100n
5112
100MHZ/220R
+5Vd
2137
100u
2119
10n
4107
4108
1112-A
OFWK9656L
4101
4102
I102
4103
I103
4104
1113-A
OFWK3953L
+8Va
3103
6K8
3104
2K2
F138
1114-A
OFWK3955L
IF-TER
B18-5
2101
10n
5101
0u82
+8Va
3101
2K2
6101
1SS356
+8Va
3102
2K2
6102
1SS356
4V9
7101
BC847BW
SEL-IF-LL
B11-7
3106
27K
0V
2103
1n
F137
3105
22K
3112
47K
7104
BC847BW
FOR /93 ONLY
SIF_PIP
B1-1
(TO CON 0221)
2126
100p
2127
100n
3138
390R
1V9
7100-C
MPIF
111 VIFPLL
IF PLL
CALIBRATOR
VCO
FFI,IFO
IFA/B/C,IFLH
LOCK
LOCK
AFC
AFA
AFB
+5Vb
F139
NC
F135
112
110
109
103
104
GND1-IF
VCC-IF
DTVIFPLL
DTVIFINP
DTVIFINN
VIFINN
I104
VIFINP
I105
SIFNP
SIFINN
5128
1u0
1V9
1V9
107 VIFINP
108 VIFINN
7V9
5129
1u0
2V
99 SIFINP
100 SIFINN
PMOD
LPF
BPF
SOUND TRAP
GROUP DELAY
ST1...0
GD
VAI, VA1...0
QSS
QSSOUT
DSIF,DDIF
TO AM INTERNAL AUDIO SWITCH
I106
101 SIFAGC
2128
2u2
2V
SIF AGC DET
2nd SIF AGC
HPF
2ndSIF A/D
SLPM
105 TUNERAGC
2V
I/V
VSW
TO
VIDEO AGC DET
GATING
PMOD.AGC O/I
2115
10n
3116
220R
2ndSIFEXT
F134
113 2NDSIFEXT
106 FUSE4
GND2-IF
FUSE5
GND-SUP
TESTPIN1
115
119
121
124
CVBSOUTIF 120
DTVOUTP 116
DTVOUTN 117 NC
VCC1-VSW 122
VCC-SUP 118
VCC2-VSW 125
2NDSIFAGC 114
DTVIFAGC 102 NC
+5Va
+5Vd
+5Va
I107
2V
2136
10u
2V2
CVBSOUTIF
B2-12
3135
100R
+8Vc
7131
BC847BW
2132
10n
SIF_MAIN
B1-2
3137
1K
FOR PIP/DW ONLY
1112-B
OFWK9656L
1113-B
OFWK3953L
1114-B
OFWK3955L
MT
NC
+5V
3131
10K
TUNER_AGC
I108
3132
100R
2130
22n
3133
15K
AGC
B18-11
PIP_AUDIO
B3-3
SIF_MAIN
B1-2
SIF_PIP
B1-1
CVBS_PIP_TUN2
B2-4
1115
C
NC
TO/FROM 1115 OF PIP PANEL
3139 123 5536.2
CL 36532058_022.eps
211103

Small Signal Board: Video Source Selection & Data Link

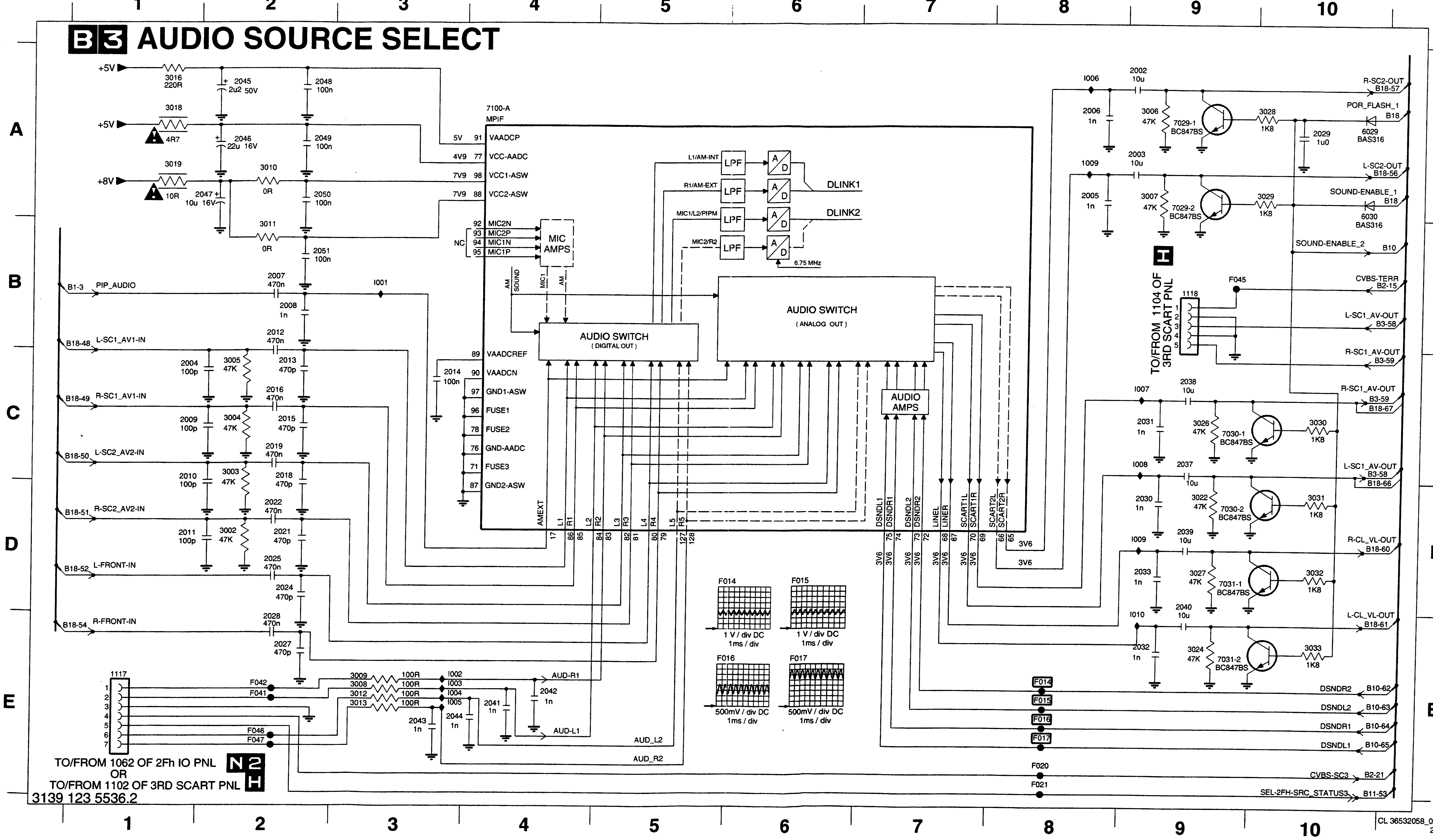
1116 E1
2060 A3
2062 B4
2063 C2
2064 C2
2065 C2
2066 D2
2067 D2
2068 D2
2069 D2
2070 D2
2071 D2
2072 E2
2073 E2
2074 E2
2075 E2
2076 E2
2078 E3
2079 F4
2081 F3
2082 A7
2083 C4
2084 C4
2085 D3
2086 D4
2087 C2
2088 A8
3060 A2
3061 A8
3062 B3
3063 B3
3064 C2
3065 C2
3066 A8
3067 B7
3068 B7
3070 B1
3071 B3
3072 E3
3073 E3
3074 E3
4062 E2
4152 D1
4153 E2
5060 E3
5061 F3
5063 A8
7060-A A3
7060-B B2
7062 B8
7063 B7
7100-B B4
F060 B1
F064 B7
F074 E2
F075 F1
F076 E1
F077 E1
F078 E1
F080 B4
F088 F7
F089 F7
I061 C3
I062 C3
I063 D3
I064 D3


B2 VIDEO SOURCE SELECTION AND DATA LINK
1 2 3 4 5 6 7 8 9
A B C D E F
CVBS_TER_OUT B18-29
+5V
5063 100MHz/220R
5062 100MHz/220R
2082 2u2
3066 2K2
3061 2K2
2088 2u2
7063 BC857B
1V9
CVBS-SC2_MON-OUT
(CONNECT TO 3D COMB FILTER) B18-30
B17-14
3067 1K0
1V4
7062 BC857B
3068 1K0
B3-15 CVBS-TERR
3070 100R
B1-12 CVBSOUTIF
F060
3060 2K2
7060-A BC847BPN
2060 100n
7060-B BC847BPN
2V8
2V2
3062 180R
3063 180R
2062 100n
1V6
F080
7100-B MPIF
123 CVBS-IF
126 CVBS-1
1 CVBS-2
12 CVBS-DTV
3071 100R
CVBS
2083 100n
2084 100n
B18-16 CVBS-SC1_AV1-IN
RES 3064 150R
2063 100n
2064 100n
I061
I062
B1-4 CVBS_PIP_TUN2
B18-17 Y-CVBS-SC2_AV2-IN
2087 100n
2065 100n
RES 3065 150R
4 CVBS|Y-3
5 C-3
8 CVBS|Y-4
9 C-4
15 Y-COMB
16 C-COMB
6 GND-VSW
B18-18 C-SC2_SVHS-IN
B18-19 Y-CVBS-FRONT-IN
B18-20 C-FRONT-IN
B17-27 YOUT-COMB
B3-21 CVBS-SC3
4152
B17-28 COUT-COMB
2066 100n
2067 100n
2068 100n
2069 100n
2070 100n
I063
I064
2085 100n
2086 100n
IDENT
VID
VIM
CVBS-OUTA
CVBS/Y PRIM
C- PRIM
CLAMP
LPF
CLP PRIM
ICPL
A/D
DM 1...0
54 MHz
Yyuv 2Fh
LR PRIM DIG
DATA LINK 1
CVBS-OUTA 19
CVBS-OUTB 22
F064
STROBE1N 60 0V3
STROBE1P 61 0V3
DATA1N 62 0V3
DATA1P 63 0V3
STROBE1N B5-31
STROBE1P B5-32
DATA1N B5-33
DATA1P B5-34
S1 S2 S3 S4
CLAMP
CLP SEC
2nd SIF A/D
54 MHz
TEST HV-P/S DIG
DATA LINK 3
PRI 3...0 SEC 3...0 CVO 3...0
CVBS SEC
STROBE3N 50
STROBE3P 51
DATA3N 52
DATA3P 53
STROBE3N B5-35
STROBE3P B5-36
DATA3N B5-37
DATA3P B5-38
100mV / div DC 20µs / div
B18-22 R-SC1_V-IN
B18-23 G-SC1-IN_Y-IN
B18-24 B-SC1-IN_U-IN
2071 100n
2072 100n
2073 100n
25 R|PR|V-1
26 G|Y|Y-1
27 B|PB|U-1
30 R|PR|V-2
31 G|Y|Y-2
32 B|PB|U-2
YUV RGB SOURCE SWITCH
RSEL
CLPS CLON HDTV
CLAMP
CLP yuv
LEVEL ADAPT
INVERSE PAL MATRIX
DVD MAT
ICPL
Yyuv U V
Yyuv 2Fh
DM 1...0
U,V
DATA LINK 3
MONO SEC DIG
DM 1...0
297MHz
27MHz
54MHz
CLK PLL
ROK
DATA LINK PLL
STROBE2N 55
STROBE2F 56
DATA2N 57
DATA2P 58
STROBE2N B5-39
STROBE2P B5-40
DATA2N B5-41
DATA2P B5-42
1116
R-PR-2FH F076
G-Y-2FH F077
B-PB-2FH F078
2074 100n
2075 100n
2076 100n
3072 100R
3073 100R
3074 100R
FBL
4153
4062
F074
F075
+5V
5060 100HZ/220R
2078 100n
49 VCC-DIG
48 GND-DIG
47 VD2V5
54 FUSE10
64 VCC-I2D
59 GND-I2D
5061 100HZ/220R
2079 100n
2081 100n
CLP PRIM
CLP SEC
CLP yuv
TIMING CIRCUIT
CLPS
HV-PRIM 46 F088 0V3
HV-SEC 45 F089 0V4
HV_PRM B5-43
HV_SEC B5-44
TO/FROM 1002 OF 2Fh IO PNL N1
OR
TO/FROM 1103 OF 3RD SCART PNL H
H-2FH B5-25
V-2FH B5-26
3139 123 5536.2
CL 36532058_023.eps 030903

Small Signal Board: Audio Source Select

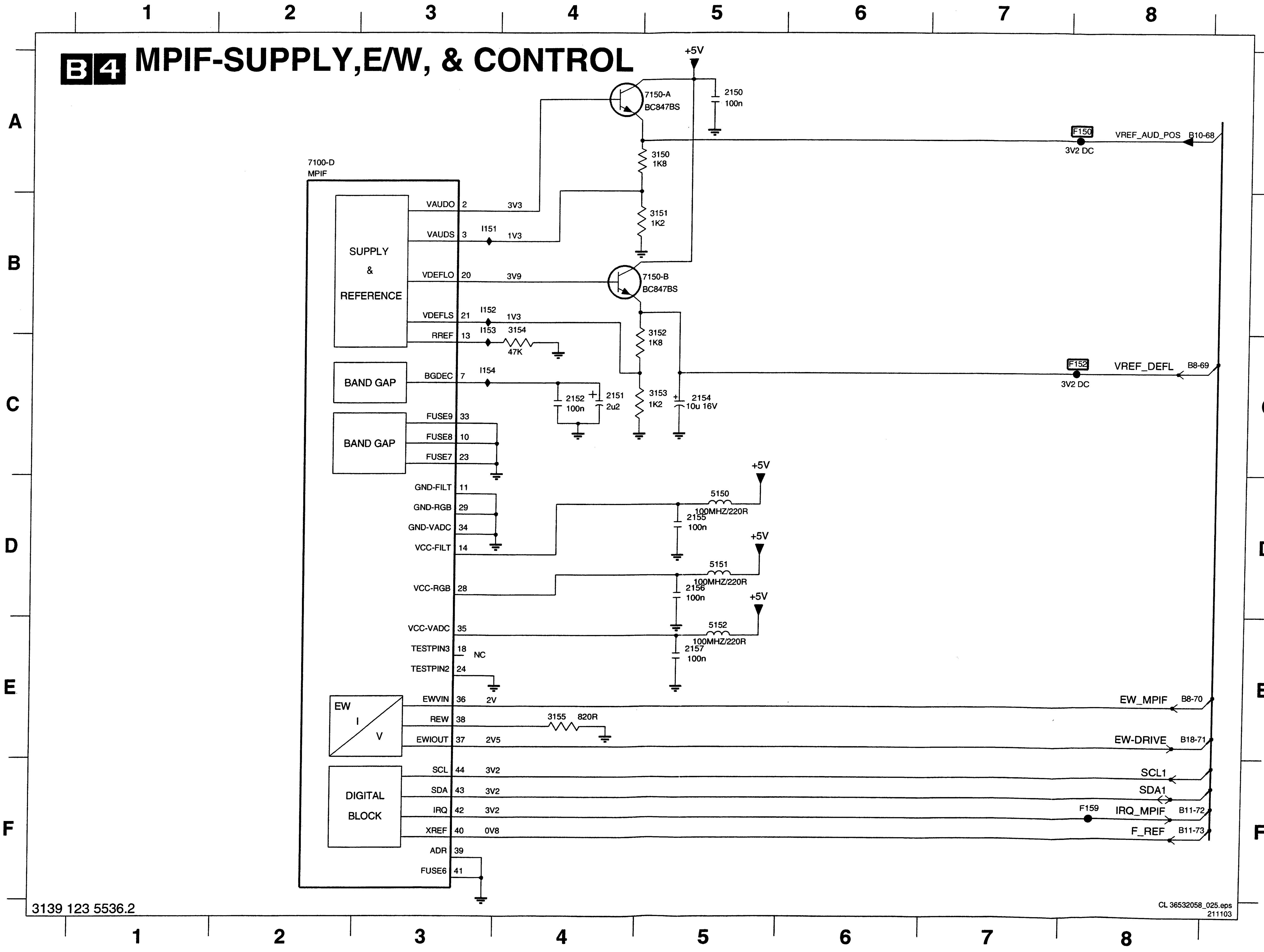
1009 A8
1117 E1
1118 B9
2002 A9
2003 A9
2004 C1
2005 A8
2006 A8
2007 B2
2008 B2
2009 C1
2010 C1
2011 D1
2012 B2
2013 C2
2014 C3
2015 C2
2016 C2
2018 C2
2019 C2
2021 D2
2022 D2
2024 D2
2025 D2
2027 E2
2028 E2
2029 A10
2030 D9
2031 C9
2032 E9
2033 D9
2037 C9
2038 C9
2039 D9
2040 D9
2041 E4
2042 E4
2043 E3
2044 E3
2045 A2
2046 A2
2047 A2
2048 A2
2049 A2
2050 A2
2051 B2
3002 D2
3003 C2
3004 C2
3005 C2
3006 A9
3007 A9
3008 E3
3009 E3
3010 A2
3011 B2
3012 E3
3013 E3
3016 A1
3018 A1
3019 A1
3022 D9
3024 E9
3026 C9
3027 D9
3028 A10
3029 A10
3030 C10
3031 D10
3032 D10
3033 E10
6029 A10
6030 A10
7029-1 A9
7029-2 A9
7030-1 C9
7030-2 D9
7031-1 D9
7031-2 E9
7100-A A4
F014 E8
F015 E8
F016 E8
F017 E8
F020 E8
F021 E8
F041 E2
F042 E2
F045 B10
F046 E2
F047 E2
I001 B3
I002 E3
I003 E3
I004 E3
I005 E3
I006 A8
I007 C9
I008 C9
I009 D9
I010 D9

B3 AUDIO SOURCE SELECT


1
2
3
4
5
6
7
8
9
10
A
B
C
D
E
+5V
3016 220R
2045 2u2 50V
2048 100n
3018 4R7
2046 22u 16V
2049 100n
+8V
3019 10R
2047 10u 16V
3010 0R
2050 100n
3011 0R
2051 100n
7100-A MPIF
5V 91 VAADCP
4V9 77 VCC-AADC
7V9 98 VCC1-ASW
7V9 88 VCC2-ASW
92 MIC2N
93 MIC2P
94 MIC1N
95 MIC1P
NC
MIC AMPS
AM SOUND
MIC1
AM
L1/AM-INT
R1/AM-EXT
MIC1/L2/PIPM
MIC2/R2
LPF
A D
DLINK1
DLINK2
6.75 MHz
AUDIO SWITCH (DIGITAL OUT)
AUDIO SWITCH (ANALOG OUT)
AUDIO AMPS
89 VAADCREF
90 VAADCN
97 GND1-ASW
96 FUSE1
78 FUSE2
76 GND-AADC
71 FUSE3
87 GND2-ASW
2014 100n
AMEXT L1 R1 L2 R2 L3 R3 L4 R4 L5 R5
17 86 85 84 83 82 81 80 79 127 128
DSNDL1 DSNDR1 DSNDL2 DSNDR2 LINEL LINER SCART1L SCART1R SCART2L SCART2R
75 74 73 72 68 67 70 69 66 65
3V6
B1-3 PIP_AUDIO
2007 470n
2008 1n
I001
B18-48 L-SC1_AV1-IN
2012 470n
2004 100p
3005 47K
2013 470p
B18-49 R-SC1_AV1-IN
2016 470n
2009 100p
3004 47K
2015 470p
B18-50 L-SC2_AV2-IN
2019 470n
2010 100p
3003 47K
2018 470p
B18-51 R-SC2_AV2-IN
2022 470n
2011 100p
3002 47K
2021 470p
B18-52 L-FRONT-IN
2025 470n
2024 470p
B18-54 R-FRONT-IN
2028 470n
2027 470p
1117
F042
F041
F046
F047
3009 100R
3008 100R
3012 100R
3013 100R
I002
I003
I004
I005
AUD-R1
AUD-L1
AUD_L2
AUD_R2
2041 1n
2042 1n
2043 1n
2044 1n
TO/FROM 1062 OF 2Fh IO PNL N2
OR
TO/FROM 1102 OF 3RD SCART PNL H
3139 123 5536.2
F014
F015
F016
F017
1 V / div DC 1ms / div
500mV / div DC 1ms / div
I006
2002 10u
2006 1n
3006 47K
7029-1 BC847BS
3028 1K8
2029 1u0
6029 BAS316
R-SC2-OUT B18-57
POR_FLASH_1 B18
I009
2003 10u
2005 1n
3007 47K
7029-2 BC847BS
3029 1K8
6030 BAS316
L-SC2-OUT B18-56
SOUND-ENABLE_1 B18
SOUND-ENABLE_2 B10
H
TO/FROM 1104 OF 3RD SCART PNL
1118
F045
CVBS-TERR B2-15
L-SC1_AV-OUT B3-58
R-SC1_AV-OUT B3-59
I007
2038 10u
2031 1n
3026 47K
7030-1 BC847BS
3030 1K8
R-SC1_AV-OUT B3-59 B18-67
I008
2037 10u
2030 1n
3022 47K
7030-2 BC847BS
3031 1K8
L-SC1_AV-OUT B3-58 B18-66
2039 10u
2033 1n
3027 47K
7031-1 BC847BS
3032 1K8
R-CL_VL-OUT B18-60
I010
2040 10u
2032 1n
3024 47K
7031-2 BC847BS
3033 1K8
L-CL_VL-OUT B18-61
DSNDR2 B10-62
DSNDL2 B10-63
DSNDR1 B10-64
DSNDL1 B10-65
F020
CVBS-SC3 B2-21
F021
SEL-2FH-SRC_STATUS3 B11-53

CL 36532058_024.eps
211103

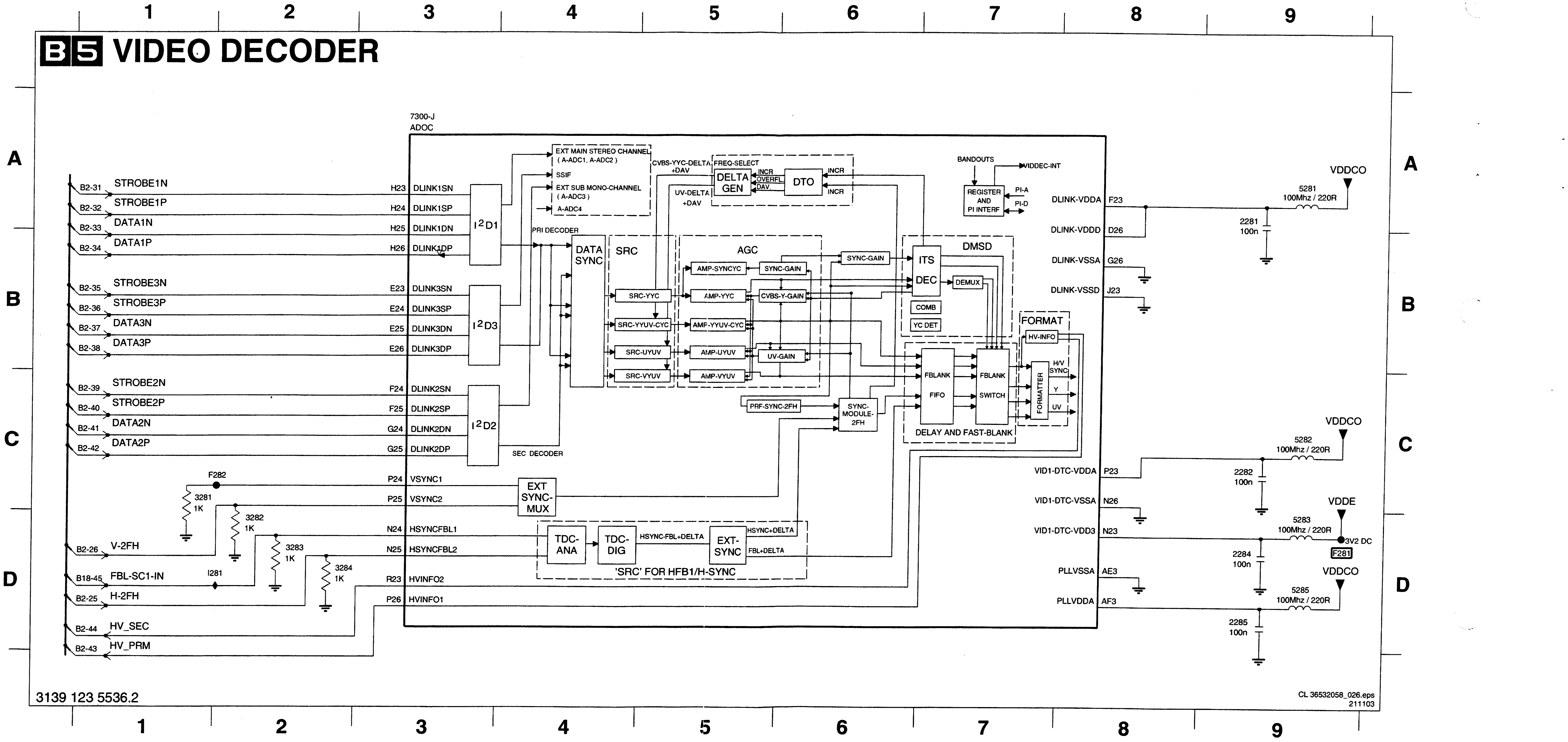
Small Signal Board: MPIF-Supply, E/W, & Control


B4 MPIF-SUPPLY,E/W, & CONTROL
1 2 3 4 5 6 7 8
A B C D E F
7100-D
MPIF
SUPPLY
&
REFERENCE
BAND GAP
BAND GAP
EW
I
V
DIGITAL
BLOCK
VAUDO 2 3V3
VAUDS 3 I151 1V3
VDEFLO 20 3V9
VDEFLS 21 I152 1V3
RREF 13 I153 3154 47K
BGDEC 7 I154
FUSE9 33
FUSE8 10
FUSE7 23
GND-FILT 11
GND-RGB 29
GND-VADC 34
VCC-FILT 14
VCC-RGB 28
VCC-VADC 35
TESTPIN3 18 NC
TESTPIN2 24
EWVIN 36 2V
REW 38
EWIOUT 37 2V5
SCL 44 3V2
SDA 43 3V2
IRQ 42 3V2
XREF 40 0V8
ADR 39
FUSE6 41
+5V
7150-A BC847BS
2150 100n
3150 1K8
3151 1K2
7150-B BC847BS
3152 1K8
3153 1K2
2152 100n
2151 2u2
2154 10u 16V
5150 100MHZ/220R
2155 100n
5151 100MHZ/220R
2156 100n
5152 100MHZ/220R
2157 100n
3155 820R
F150 3V2 DC VREF_AUD_POS B10-68
F152 3V2 DC VREF_DEFL B8-69
EW_MPIF B8-70
EW-DRIVE B18-71
SCL1
SDA1
F159 IRQ_MPIF B11-72
F_REF B11-73
3139 123 5536.2
CL 36532058_025.eps 211103

2150	A5
2151	C4
2152	C4
2154	C5
2155	D5
2156	D5
2157	E5
3150	A5
3151	B5
3152	B5
3153	C5
3154	B4
3155	E4
5150	D5
5151	D5
5152	E5
7100-D	A2
7150-A	A5
7150-B	B5
F150	A8
F152	C8
F159	F8
I151	B3
I152	B3
I153	B3
I154	C3

Small Signal Board: Video Decoder

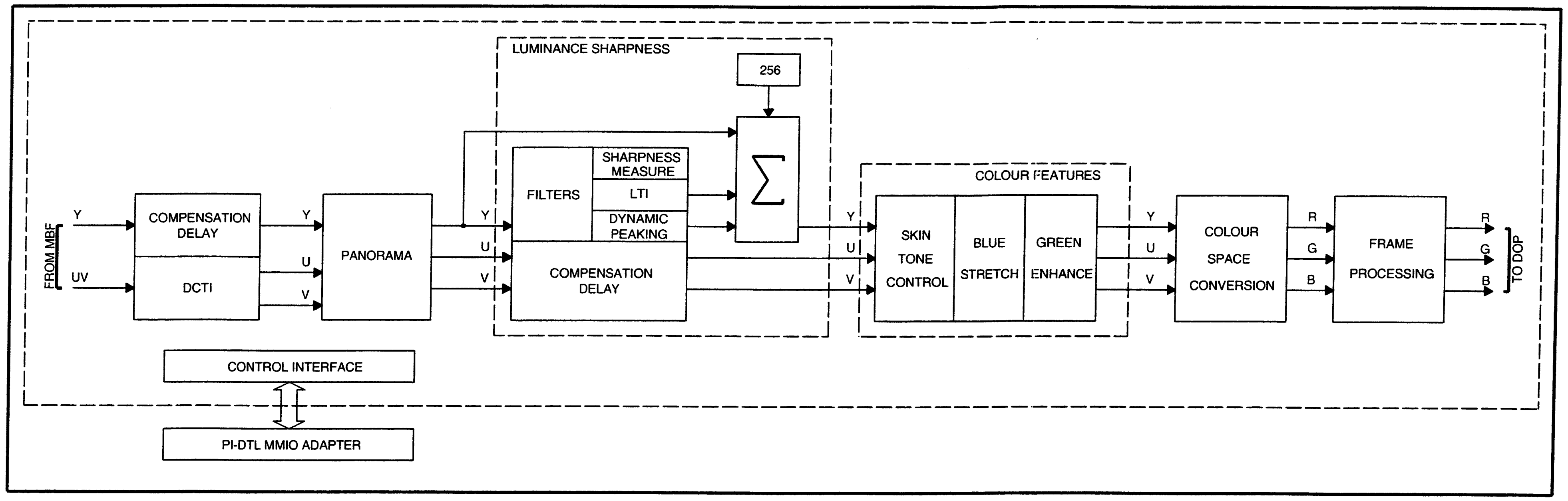
2281 A9	2282 C9	2284 D9	2285 D9	3281 C1	3282 D2	3283 D2	3284 D2	5281 A9	5282 C9	5283 D9	5285 D9	7300-J A3	F281 D9	F282 C2	I281 D2


B5 VIDEO DECODER
1
2
3
4
5
6
7
8
9
A
B
C
D
7300-J
ADOC
B2-31 STROBE1N
B2-32 STROBE1P
B2-33 DATA1N
B2-34 DATA1P
B2-35 STROBE3N
B2-36 STROBE3P
B2-37 DATA3N
B2-38 DATA3P
B2-39 STROBE2N
B2-40 STROBE2P
B2-41 DATA2N
B2-42 DATA2P
B2-26 V-2FH
B18-45 FBL-SC1-IN
B2-25 H-2FH
B2-44 HV_SEC
B2-43 HV_PRM
F282
3281 1K
3282 1K
3283 1K
3284 1K
I281
H23 DLINK1SN
H24 DLINK1SP
H25 DLINK1DN
H26 DLINK1DP
E23 DLINK3SN
E24 DLINK3SP
E25 DLINK3DN
E26 DLINK3DP
F24 DLINK2SN
F25 DLINK2SP
G24 DLINK2DN
G25 DLINK2DP
P24 VSYNC1
P25 VSYNC2
N24 HSYNCFBL1
N25 HSYNCFBL2
R23 HVINFO2
P26 HVINFO1
I2D1
I2D3
I2D2
PRI DECODER
SEC DECODER
EXT MAIN STEREO CHANNEL (A-ADC1, A-ADC2)
SSIF
EXT SUB MONO-CHANNEL (A-ADC3)
A-ADC4
CVBS-YYC-DELTA +DAV
UV-DELTA +DAV
FREQ-SELECT
DELTA GEN
INCR
OVERFL
DAV
DTO
INCR
INCR
DATA SYNC
SRC
SRC-YYC
SRC-YYUV-CYC
SRC-UYUV
SRC-VYUV
AGC
AMP-SYNCYC
SYNC-GAIN
AMP-YYC
CVBS-Y-GAIN
AMP-YYUV-CYC
AMP-UYUV
UV-GAIN
AMP-VYUV
SYNC-GAIN
DMSD
ITS
DEC
DEMUX
COMB
YC DET
PRF-SYNC-2FH
SYNC-MODULE-2FH
FBLANK FIFO
FBLANK SWITCH
DELAY AND FAST-BLANK
FORMAT
HV-INFO
FORMATTER
H/V SYNC
Y
UV
BANDOUTS
VIDDEC-INT
REGISTER AND PI INTERF
PI-A
PI-D
EXT SYNC-MUX
TDC-ANA
TDC-DIG
HSYNC-FBL+DELTA
EXT-SYNC
HSYNC+DELTA
FBL+DELTA
'SRC' FOR HFB1/H-SYNC
DLINK-VDDA F23
DLINK-VDDD D26
DLINK-VSSA G26
DLINK-VSSD J23
VID1-DTC-VDDA P23
VID1-DTC-VSSA N26
VID1-DTC-VDD3 N23
PLLVSSA AE3
PLLVDDA AF3
VDDCO
5281 100Mhz / 220R
2281 100n
VDDCO
5282 100Mhz / 220R
2282 100n
VDDE
5283 100Mhz / 220R
3V2 DC
F281
2284 100n
VDDCO
5285 100Mhz / 220R
2285 100n
3139 123 5536.2
CL 36532058_026.eps 211103

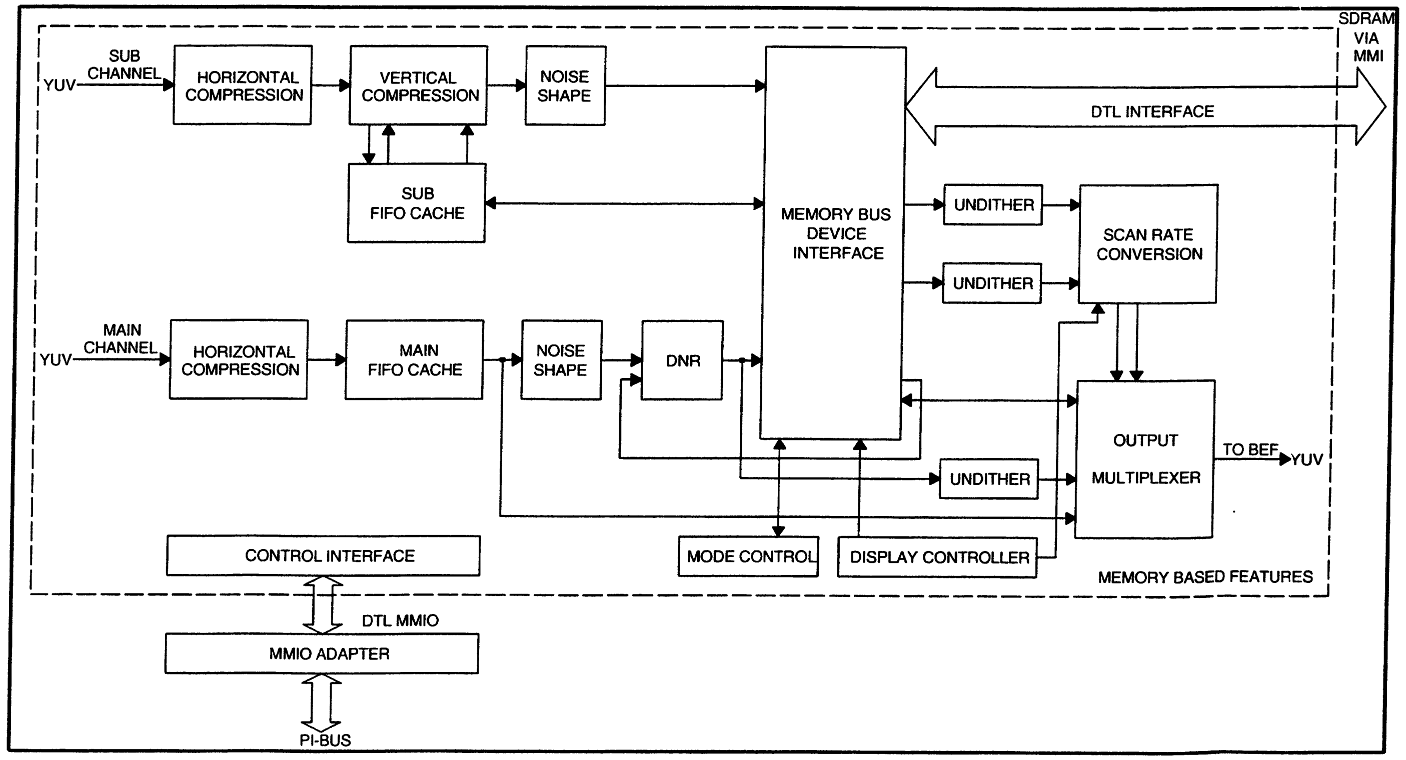
Small Signal Board: Feature Box

B6 FEATURE BOX

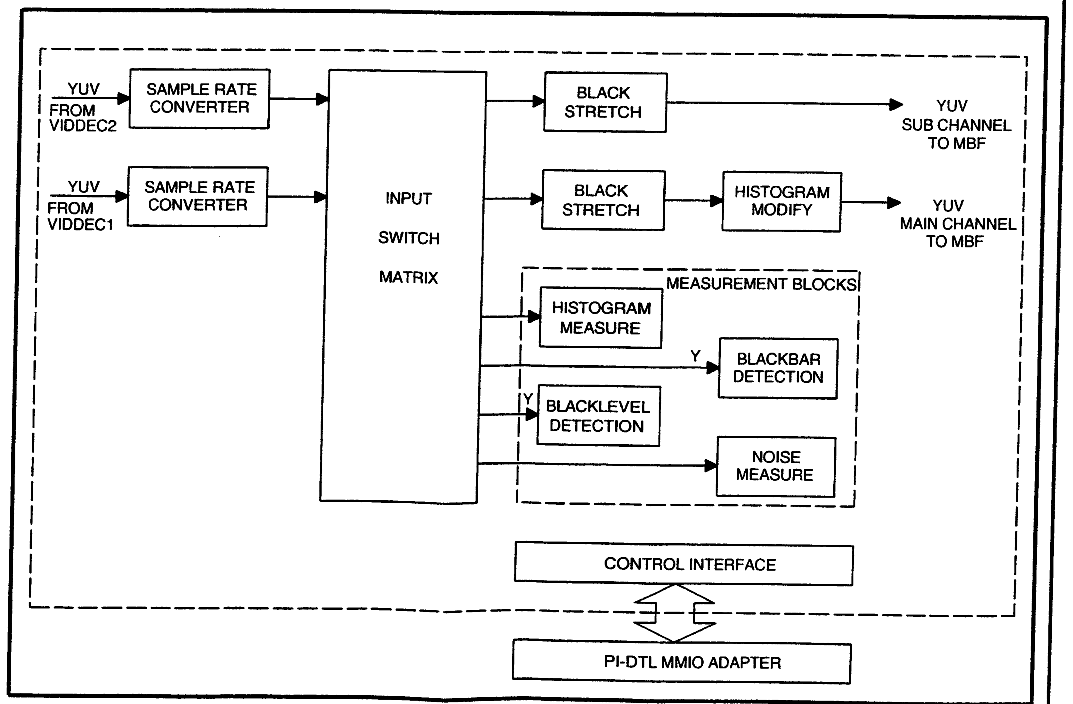
7300
BACK END PROCESSING


LUMINANCE SHARPNESS
256
Σ
FROM MBF
Y
UV
COMPENSATION DELAY
DCTI
Y
U
V
PANORAMA
Y
U
V
FILTERS
SHARPNESS MEASURE
LTI
DYNAMIC PEAKING
COMPENSATION DELAY
COLOUR FEATURES
Y
U
V
SKIN TONE CONTROL
BLUE STRETCH
GREEN ENHANCE
Y
U
V
COLOUR SPACE CONVERSION
R
G
B
FRAME PROCESSING
R
G
B
TO DOP
CONTROL INTERFACE
PI-DTL MMIO ADAPTER

7300
MEMORY BASED PROCESSING


SDRAM VIA MMI
YUV
SUB CHANNEL
HORIZONTAL COMPRESSION
VERTICAL COMPRESSION
NOISE SHAPE
SUB FIFO CACHE
MEMORY BUS DEVICE INTERFACE
DTL INTERFACE
UNDITHER
UNDITHER
SCAN RATE CONVERSION
YUV
MAIN CHANNEL
HORIZONTAL COMPRESSION
MAIN FIFO CACHE
NOISE SHAPE
DNR
OUTPUT MULTIPLEXER
TO BEF
YUV
UNDITHER
CONTROL INTERFACE
MODE CONTROL
DISPLAY CONTROLLER
MEMORY BASED FEATURES
DTL MMIO
MMIO ADAPTER
PI-BUS

7300
FRONT END PROCESSING

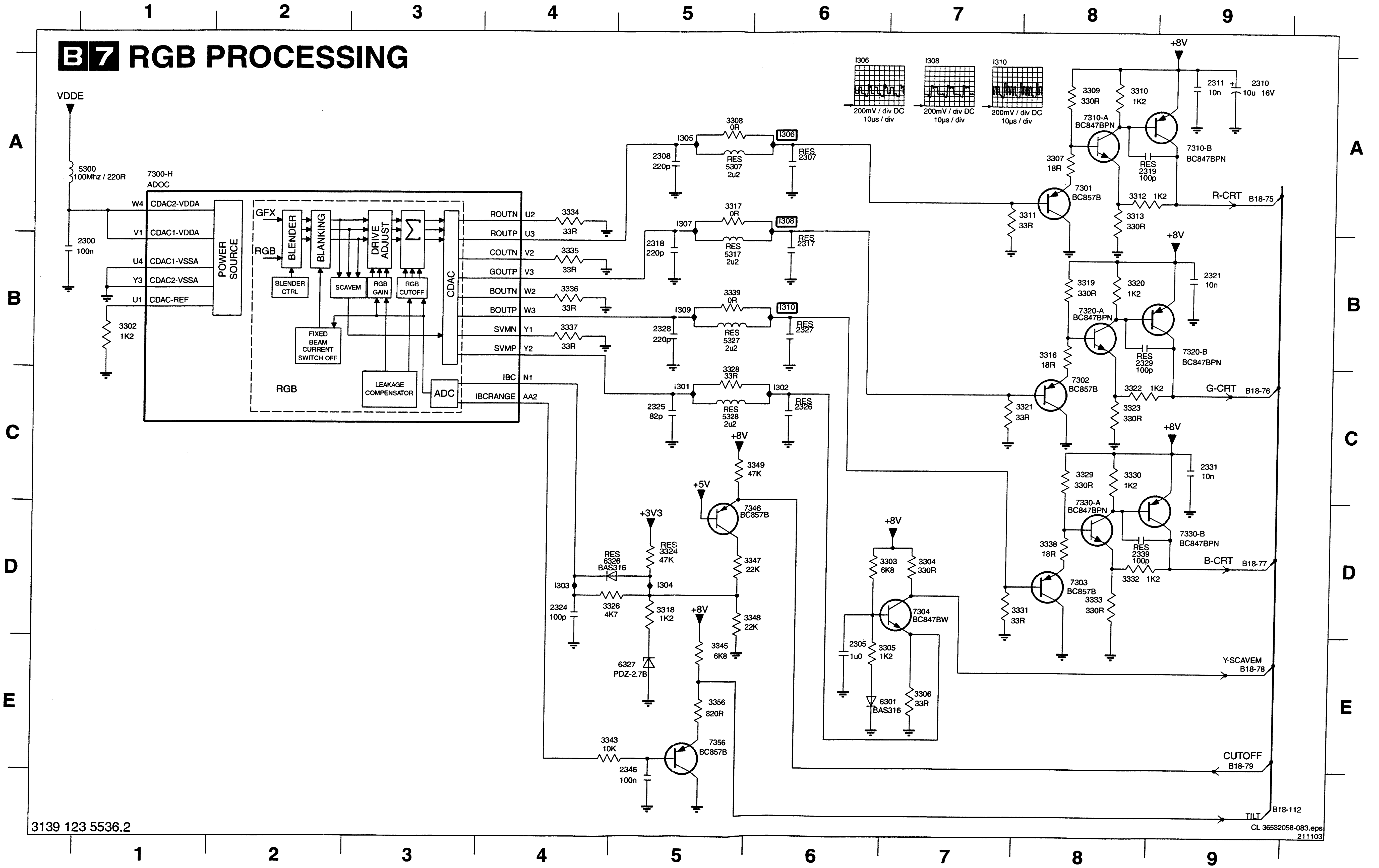

YUV
FROM VIDDEC2
SAMPLE RATE CONVERTER
YUV
FROM VIDDEC1
SAMPLE RATE CONVERTER
INPUT SWITCH MATRIX
BLACK STRETCH
YUV SUB CHANNEL TO MBF
BLACK STRETCH
HISTOGRAM MODIFY
YUV MAIN CHANNEL TO MBF
MEASUREMENT BLOCKS
HISTOGRAM MEASURE
Y
BLACKBAR DETECTION
Y
BLACKLEVEL DETECTION
NOISE MEASURE
CONTROL INTERFACE
PI-DTL MMIO ADAPTER

3139 123 5536.2

CL 36532058_027.eps
020903

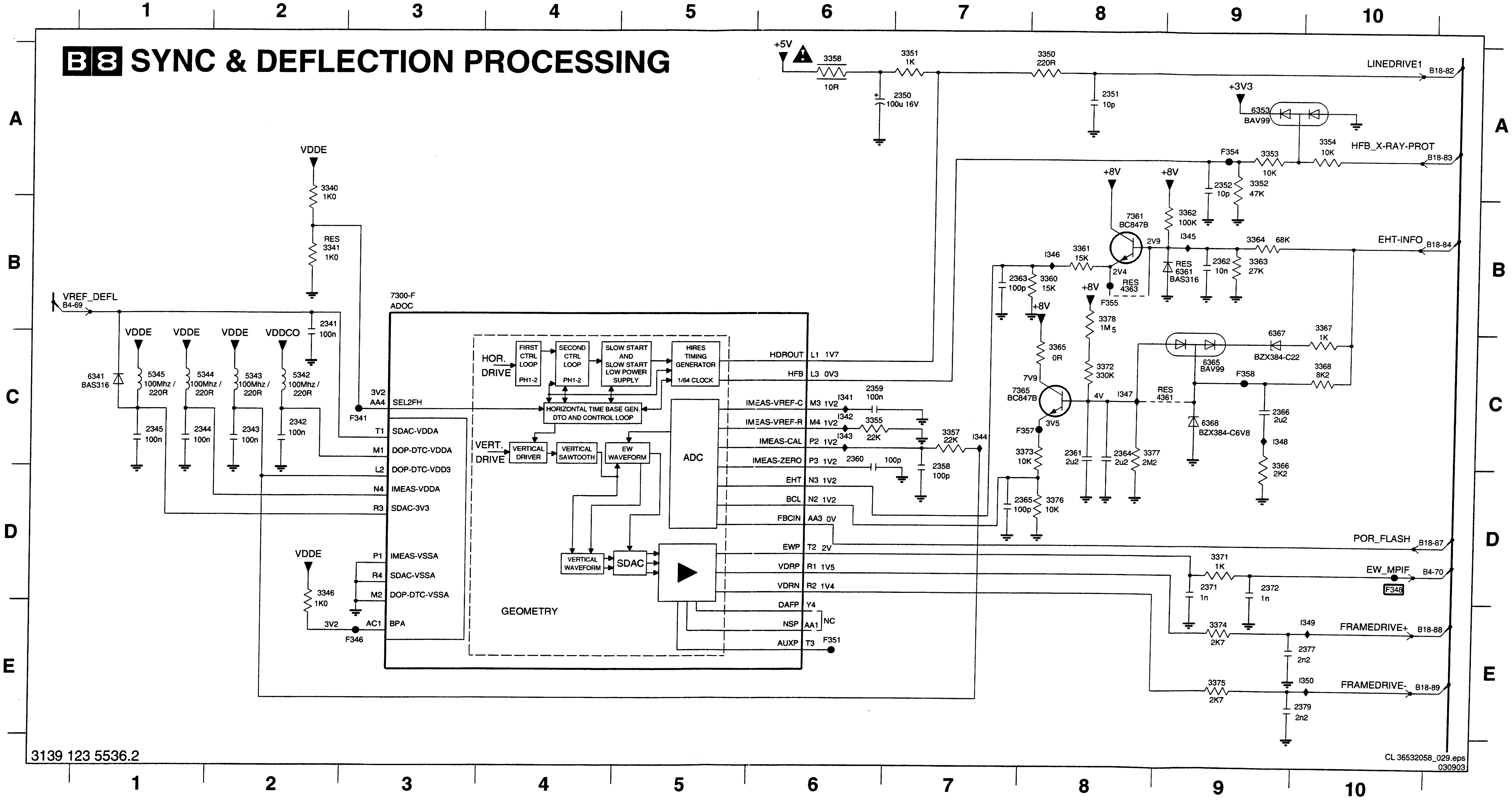
Small Signal Board: RGB Processing

2300	B1
2305	E6
2307	A6
2308	A5
2310	A9
2311	A9
2317	B6
2318	B5
2319	A8
2321	B9
2324	D4
2325	C5
2326	C6
2327	B6
2328	B5
2329	B8
2331	C9
2339	D8
2346	E5
3302	B1
3303	D7
3304	D7
3305	E7
3306	E7
3307	A8
3308	A5
3309	A8
3310	A8
3311	A8
3312	A8
3313	A8
3316	B8
3317	A5
3318	D5
3319	B8
3320	B8
3321	C8
3322	C8
3323	C8
3324	D5
3326	D4
3328	C5
3329	C8
3330	C8
3331	D8
3332	D8
3333	D8
3334	A4
3335	B4
3336	B4
3337	B4
3338	D8
3339	B5
3343	E4
3345	E5
3347	D6
3348	D6
3349	C6
3356	E5
5300	A1
5307	A5
5317	B5
5327	B5
5328	C5
6301	E7
6326	D4
6327	E5
7300-H	A1
7301	A8
7302	C8
7303	D8
7304	D7
7310-A	A8
7310-B	A9
7320-A	B8
7320-B	B9
7330-A	D8
7330-B	D9
7346	D5
7356	E5
I301	C5
I302	C6
I303	D4
I304	D5
I305	A5
I306	A6
I307	A5
I308	A6
I309	B5
I310	B6


B7 RGB PROCESSING
1
2
3
4
5
6
7
8
9
A
B
C
D
E
VDDE
5300
100Mhz / 220R
2300
100n
3302
1K2
7300-H
ADOC
W4
CDAC2-VDDA
V1
CDAC1-VDDA
U4
CDAC1-VSSA
Y3
CDAC2-VSSA
U1
CDAC-REF
POWER SOURCE
GFX
RGB
BLENDER
BLANKING
DRIVE ADJUST
Σ
CDAC
BLENDER CTRL
SCAVEM
RGB GAIN
RGB CUTOFF
FIXED BEAM CURRENT SWITCH OFF
LEAKAGE COMPENSATOR
ADC
RGB
ROUTN
U2
ROUTP
U3
COUTN
V2
GOUTP
V3
BOUTN
W2
BOUTP
W3
SVMN
Y1
SVMP
Y2
IBC
N1
IBCRANGE
AA2
3334
33R
3335
33R
3336
33R
3337
33R
I306
I308
I310
200mV / div DC
10µs / div
3308
0R
I305
I306
2308
220p
RES
5307
2u2
RES
2307
3317
0R
I307
I308
2318
220p
RES
5317
2u2
RES
2317
3339
0R
I309
I310
2328
220p
RES
5327
2u2
RES
2327
3328
33R
I301
I302
2325
82p
RES
5328
2u2
RES
2326
+8V
3309
330R
3310
1K2
2311
10n
2310
10u 16V
7310-A
BC847BPN
7310-B
BC847BPN
RES
2319
100p
3307
18R
7301
BC857B
3311
33R
3312 1K2
3313
330R
R-CRT
B18-75
3319
330R
3320
1K2
2321
10n
7320-A
BC847BPN
7320-B
BC847BPN
RES
2329
100p
3316
18R
7302
BC857B
3321
33R
3322 1K2
3323
330R
G-CRT
B18-76
3329
330R
3330
1K2
2331
10n
7330-A
BC847BPN
7330-B
BC847BPN
RES
2339
100p
3338
18R
7303
BC857B
3331
33R
3332 1K2
3333
330R
B-CRT
B18-77
3349
47K
+5V
7346
BC857B
+3V3
RES
3324
47K
RES
6326
BAS316
I303
I304
3326
4K7
2324
100p
3318
1K2
3347
22K
3348
22K
3345
6K8
6327
PDZ-2.7B
3356
820R
3343
10K
2346
100n
7356
BC857B
3303
6K8
3304
330R
7304
BC847BW
2305
1u0
3305
1K2
6301
BAS316
3306
33R
Y-SCAVEM
B18-78
CUTOFF
B18-79
TILT
B18-112
3139 123 5536.2
CL 36532058-083.eps
211103

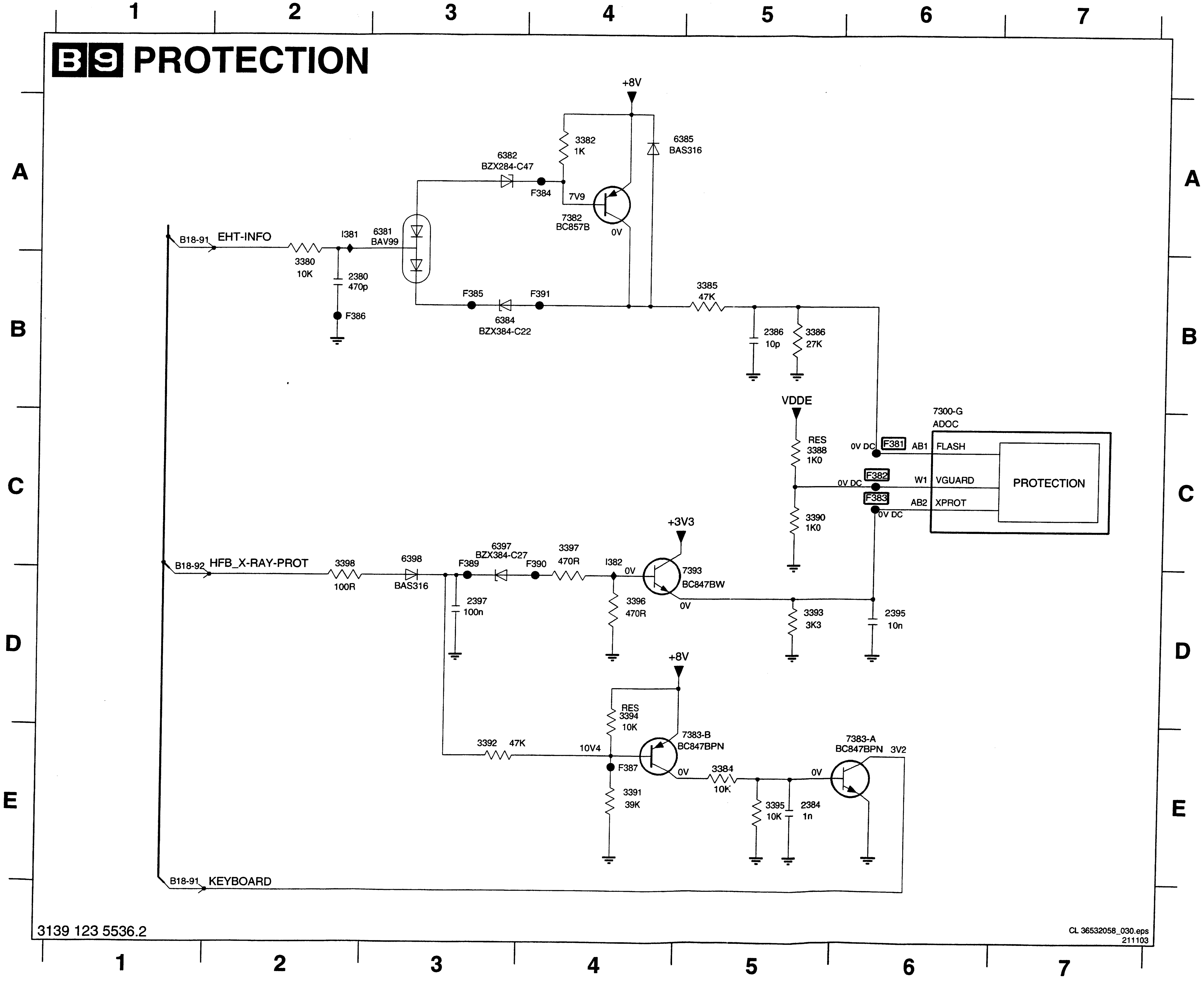
Small Signal Board: Sync & Deflection Processing

2341 B2
2342 C2
2343 C2
2344 C1
2345 C1
2350 A7
2351 A8
2352 A9
2358 D7
2359 C6
2360 C6
2361 C8
2362 B9
2363 B7
2364 C8
2365 D8
2366 C9
2371 D9
2372 D9
2377 E10
2379 E10
3340 A2
3341 B2
3346 D2
3350 A8
3351 A7
3352 A9
3353 A9
3354 A10
3355 C6
3357 C7
3358 A6
3360 B8
3361 B8
3362 B9
3363 B9
3364 B9
3365 C8
3366 C9
3367 B10
3368 C10
3371 D9
3372 C8
3373 C8
3374 E9
3375 E9
3376 D8
3377 C8
3378 B8
4361 C9
4363 B8
5342 C2
5343 C2
5344 C1
5345 C1
6341 C1
6353 A9
6361 B9
6365 C9
6367 C9
6368 C9
7300-F B3
7361 B8
7365 C8
F341 C3
F346 E3
F348 D10
F351 E6
F354 A9
F355 B8
F357 C8
F358 C9
I341 C6
I342 C6
I343 C6
I344 C7
I345 B9
I346 B8
I347 C8
I348 C9
I349 E10
I350 E10


B8 SYNC & DEFLECTION PROCESSING
1 2 3 4 5 6 7 8 9 10
A B C D E
VDDE
3340 1K0
RES 3341 1K0
VREF_DEFL B4-69
VDDE VDDE VDDE VDDCO
2341 100n
6341 BAS316
5345 100Mhz / 220R
5344 100Mhz / 220R
5343 100Mhz / 220R
5342 100Mhz / 220R
2345 100n
2344 100n
2343 100n
2342 100n
7300-F ADOC
3V2 AA4 SEL2FH
F341
T1 SDAC-VDDA
M1 DOP-DTC-VDDA
L2 DOP-DTC-VDD3
N4 IMEAS-VDDA
R3 SDAC-3V3
VDDE
3346 1K0
P1 IMEAS-VSSA
R4 SDAC-VSSA
M2 DOP-DTC-VSSA
3V2 AC1 BPA
F346
HOR. DRIVE
FIRST CTRL LOOP PH1-2
SECOND CTRL LOOP PH1-2
SLOW START AND SLOW START LOW POWER SUPPLY
HIRES TIMING GENERATOR 1/64 CLOCK
HORIZONTAL TIME BASE GEN. DTO AND CONTROL LOOP
VERT. DRIVE
VERTICAL DRIVER
VERTICAL SAWTOOTH
EW WAVEFORM
ADC
VERTICAL WAVEFORM
SDAC
GEOMETRY
HDROUT L1 1V7
HFB L3 0V3
IMEAS-VREF-C M3 1V2
IMEAS-VREF-R M4 1V2
IMEAS-CAL P2 1V2
IMEAS-ZERO P3 1V2
EHT N3 1V2
BCL N2 1V2
FBCIN AA3 0V
EWP T2 2V
VDRP R1 1V5
VDRN R2 1V4
DAFP Y4
NSP AA1 NC
AUXP T3 F351
I341 I342 I343 I344
2359 100n
3355 22K
3357 22K
2360 100p
2358 100p
+5V
3358 10R
2350 100u 16V
3351 1K
3350 220R
2351 10p
LINEDRIVE1 B18-82
+3V3
6353 BAV99
F354 3353 10K
3354 10K
HFB_X-RAY-PROT B18-83
+8V +8V
2352 10p
3352 47K
3362 100K
7361 BC847B
2V9 2V4
I345
I346
3361 15K
RES 6361 BAS316
2362 10n
3363 27K
3364 68K
EHT-INFO B18-84
2363 100p
3360 15K
+8V F355
RES 4363
+8V
3378 1M5
3365 0R
3372 330K
7V9
7365 BC847B
3V5
4V I347
RES 4361
F357
3373 10K
2361 2u2
2364 2u2
3377 2M2
6365 BAV99
6367 BZX384-C22
3367 1K
F358
3368 8K2
6368 BZX384-C6V8
2366 2u2
I348
3366 2K2
2365 100p
3376 10K
POR_FLASH B18-87
3371 1K
2371 1n
2372 1n
EW_MPIF B4-70
F348
3374 2K7
I349
2377 2n2
FRAMEDRIVE+ B18-88
3375 2K7
I350
2379 2n2
FRAMEDRIVE- B18-89
3139 123 5536.2
CL 36532058_029.eps
030903

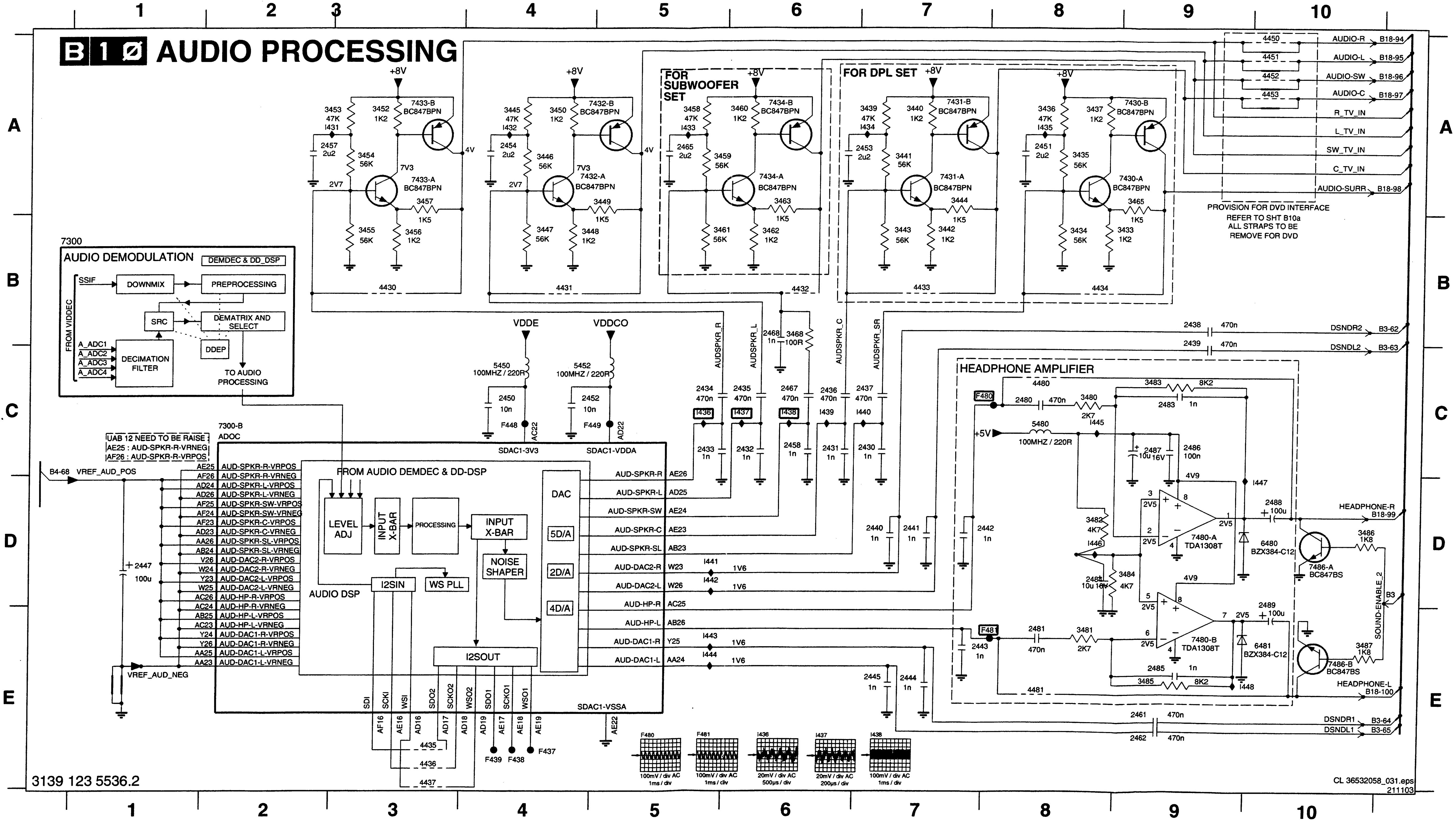
Small Signal Board: Protection

2380 B2
2386 B5
2395 E5
2395 D6
2397 D3
3380 B2
3382 A4
3384 E5
3385 B5
3386 B5
3388 C5
3390 C5
3391 E4
3392 E3
3393 D5
3394 D4
3395 E5
3396 D4
3397 C4
3398 C2
6381 A3
6382 A3
6384 B3
6385 A4
6397 C3
6398 C3
7300-G C6
7382 A4
7383-A E6
7383-B E5
7393 D5
F381 C6
F382 C6
F383 C6
F384 A4
F385 B3
F386 B2
F387 E4
F389 C3
F390 C4
F391 B4
I381 A2
I382 C4


1
2
3
4
5
6
7
A
B
C
D
E
B9 PROTECTION
+8V
3382
1K
6385
BAS316
6382
BZX284-C47
F384
7V9
7382
BC857B
0V
B18-91 EHT-INFO
3380
10K
I381
6381
BAV99
2380
470p
F386
F385
F391
6384
BZX384-C22
3385
47K
2386
10p
3386
27K
VDDE
RES
3388
1K0
3390
1K0
7300-G
ADOC
0V DC
F381
AB1
FLASH
F382
W1
VGUARD
F383
AB2
XPROT
0V DC
PROTECTION
+3V3
B18-92 HFB_X-RAY-PROT
3398
100R
6398
BAS316
6397
BZX384-C27
F389
F390
3397
470R
I382
0V
7393
BC847BW
0V
2397
100n
3396
470R
3393
3K3
2395
10n
+8V
RES
3394
10K
7383-B
BC847BPN
3392 47K
10V4
F387
0V
3384
10K
7383-A
BC847BPN 3V2
0V
3391
39K
3395
10K
2384
1n
B18-91 KEYBOARD
3139 123 5536.2
CL 36532058_030.eps
211103

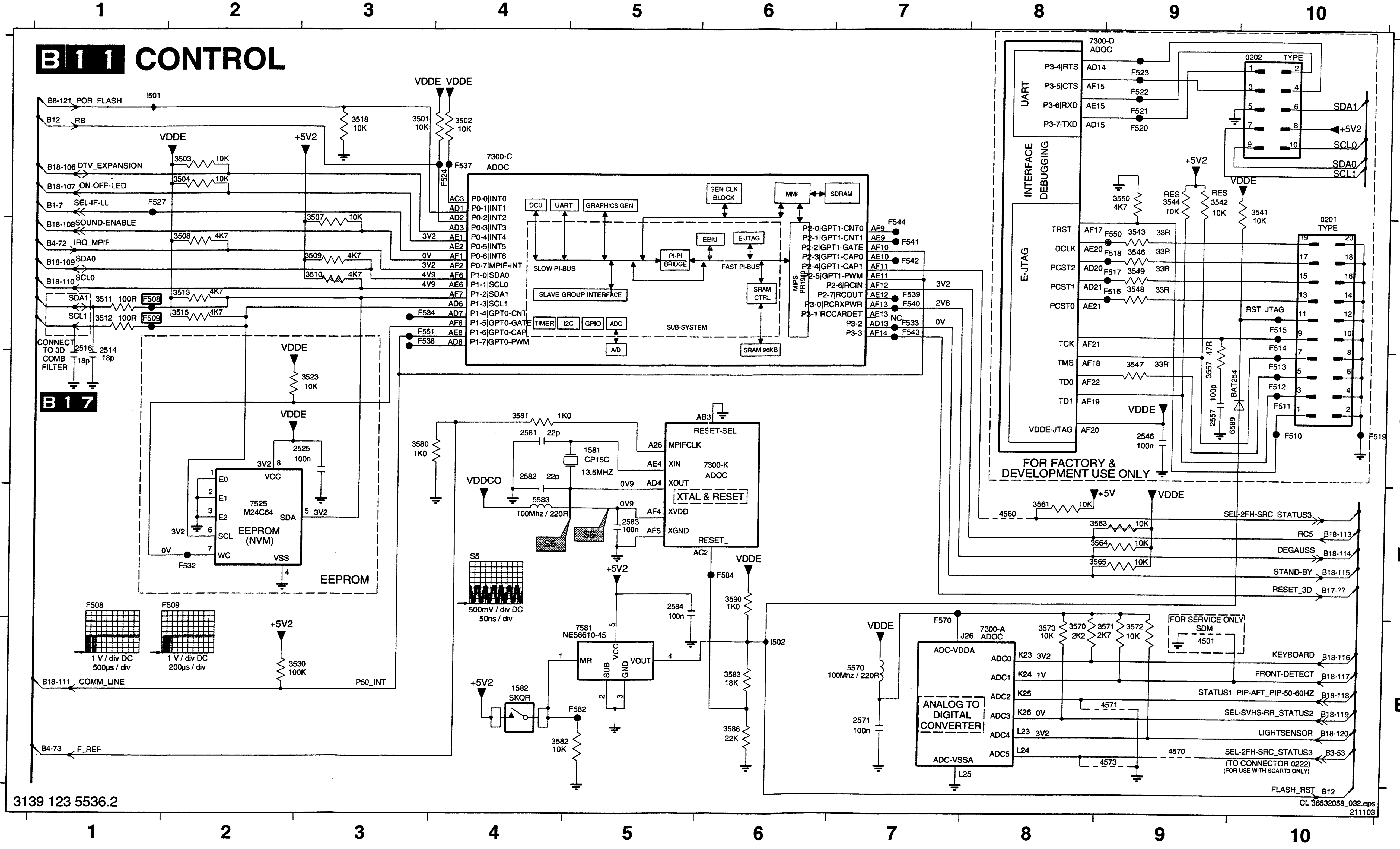
Small Signal Board: Audio Processing

2430	C7
2431	C6
2432	C6
2433	C5
2434	C5
2435	C6
2436	C6
2437	C7
2438	B9
2439	B9
2440	D7
2441	D7
2442	D8
2443	E7
2444	E7
2445	E7
2447	D1
2450	C4
2451	A8
2452	C4
2453	A7
2454	A4
2457	A2
2458	C6
2461	E9
2462	E9
2465	A5
2467	C6
2468	B6
2480	C8
2481	E8
2483	C9
2484	D8
2485	E9
2486	C9
2487	C9
2488	D10
2489	D10
3433	B9
3434	B8
3435	A8
3436	A8
3437	A8
3439	A7
3440	A7
3441	A7
3442	B7
3443	B7
3444	A7
3445	A4
3446	A4
3447	B4
3448	B4
3449	A5
3450	A4
3452	A3
3453	A2
3454	A3
3455	B3
3456	B3
3457	A3
3458	A5
3459	A5
3460	A6
3461	B5
3462	B6
3463	A6
3465	A9
3468	B6
3480	C8
3481	E8
3482	D8
3483	C9
3484	D9
3485	E9
3486	D10
3487	E10
4430	B3
4431	B4
4432	B6
4433	B7
4434	B8
4435	E3
4436	E3
4437	E3
4450	A10
4451	A10
4452	A10
4453	A10
4480	C8
4481	E8
5450	C4
5452	C4
5480	C8
6480	D10
6481	E10
7300-B	C2
7430-A	A8
7430-B	A9
7431-A	A7
7431-B	A7
7432-A	A4
7432-B	A4
7433-A	A3
7433-B	A3
7434-A	A6
7434-B	A6
7480-A	D9
7480-B	E9
7486-A	D10
7486-B	E10
F437	E4
F438	E4
F439	E4
F448	C4
F449	C4
F480	C7
F481	E8
I431	A2
I432	A4
I433	A5
I434	A7
I435	A8
I436	C5
I437	C6
I438	C6
I439	C6
I440	C7
I441	D5
I442	D5
I443	E5
I444	E5
I445	C8
I446	D8
I447	D10
I448	E10


1 2 3 4 5 6 7 8 9 10
A B C D E
B10 AUDIO PROCESSING
+8V
7433-B BC847BPN
7433-A BC847BPN
7432-B BC847BPN
7432-A BC847BPN
7434-B BC847BPN
7434-A BC847BPN
7431-B BC847BPN
7431-A BC847BPN
7430-B BC847BPN
7430-A BC847BPN
FOR SUBWOOFER SET
FOR DPL SET
4V
7V3
2V7
4430
4431
4432
4433
4434
4450
4451
4452
4453
AUDIO-R B18-94
AUDIO-L B18-95
AUDIO-SW B18-96
AUDIO-C B18-97
R_TV_IN
L_TV_IN
SW_TV_IN
C_TV_IN
AUDIO-SURR B18-98
PROVISION FOR DVD INTERFACE
REFER TO SHT B10a
ALL STRAPS TO BE
REMOVE FOR DVD
7300
AUDIO DEMODULATION
DEMDEC & DD_DSP
SSIF
DOWNMIX
PREPROCESSING
SRC
DEMATRIX AND SELECT
FROM VIDDEC
A_ADC1
A_ADC2
A_ADC3
A_ADC4
DECIMATION FILTER
DDEP
TO AUDIO PROCESSING
VDDE
VDDCO
5450 100MHZ / 220R
5452 100MHZ / 220R
2450 10n
2452 10n
F448
F449
AC22
AD22
AUDSPKR_R
AUDSPKR_L
AUDSPKR_C
AUDSPKR_SR
2438 470n DSNDR2 B3-62
2439 470n DSNDL2 B3-63
UAB 12 NEED TO BE RAISE
AE25 : AUD-SPKR-R-VRNEG
AF26 : AUD-SPKR-R-VRPOS
7300-B
ADOC
B4-68 VREF_AUD_POS
VREF_AUD_NEG
2447 100u
SDAC1-3V3
SDAC1-VDDA
SDAC1-VSSA
AE25 AUD-SPKR-R-VRPOS
AF26 AUD-SPKR-R-VRNEG
AD24 AUD-SPKR-L-VRPOS
AD26 AUD-SPKR-L-VRNEG
AF25 AUD-SPKR-SW-VRPOS
AF24 AUD-SPKR-SW-VRNEG
AF23 AUD-SPKR-C-VRPOS
AD23 AUD-SPKR-C-VRNEG
AA26 AUD-SPKR-SL-VRPOS
AB24 AUD-SPKR-SL-VRNEG
V26 AUD-DAC2-R-VRPOS
W24 AUD-DAC2-R-VRNEG
Y23 AUD-DAC2-L-VRPOS
W25 AUD-DAC2-L-VRNEG
AC26 AUD-HP-R-VRPOS
AC24 AUD-HP-R-VRNEG
AB25 AUD-HP-L-VRPOS
AC23 AUD-HP-L-VRNEG
Y24 AUD-DAC1-R-VRPOS
Y26 AUD-DAC1-R-VRNEG
AA25 AUD-DAC1-L-VRPOS
AA23 AUD-DAC1-L-VRNEG
FROM AUDIO DEMDEC & DD-DSP
LEVEL ADJ
INPUT X-BAR
PROCESSING
INPUT X-BAR
NOISE SHAPER
DAC
5D/A
2D/A
4D/A
AUDIO DSP
I2SIN
WS PLL
I2SOUT
AUD-SPKR-R AE26
AUD-SPKR-L AD25
AUD-SPKR-SW AE24
AUD-SPKR-C AE23
AUD-SPKR-SL AB23
AUD-DAC2-R W23
AUD-DAC2-L W26
AUD-HP-R AC25
AUD-HP-L AB26
AUD-DAC1-R Y25
AUD-DAC1-L AA24
1V6
SDI SCKI WSI SDO2 SCKO2 WSO2 SDO1 SCKO1 WSO1
AF16 AE16 AD16 AD17 AD18 AD19 AE17 AE18 AE19
AE22
4435
4436
4437
F437 F438 F439
HEADPHONE AMPLIFIER
F480
F481
+5V
5480 100MHZ / 220R
7480-A TDA1308T
7480-B TDA1308T
4V9
2V5
6480 BZX384-C12
6481 BZX384-C12
7486-A BC847BS
7486-B BC847BS
HEADPHONE-R B18-99
HEADPHONE-L B18-100
SOUND-ENABLE_2
B3
2461 470n DSNDR1 B3-64
2462 470n DSNDL1 B3-65
F480 100mV / div AC 1ms / div
F481 100mV / div AC 1ms / div
I436 20mV / div AC 500µs / div
I437 20mV / div AC 200µs / div
I438 100mV / div AC 1ms / div
3139 123 5536.2
CL 36532058_031.eps 211103

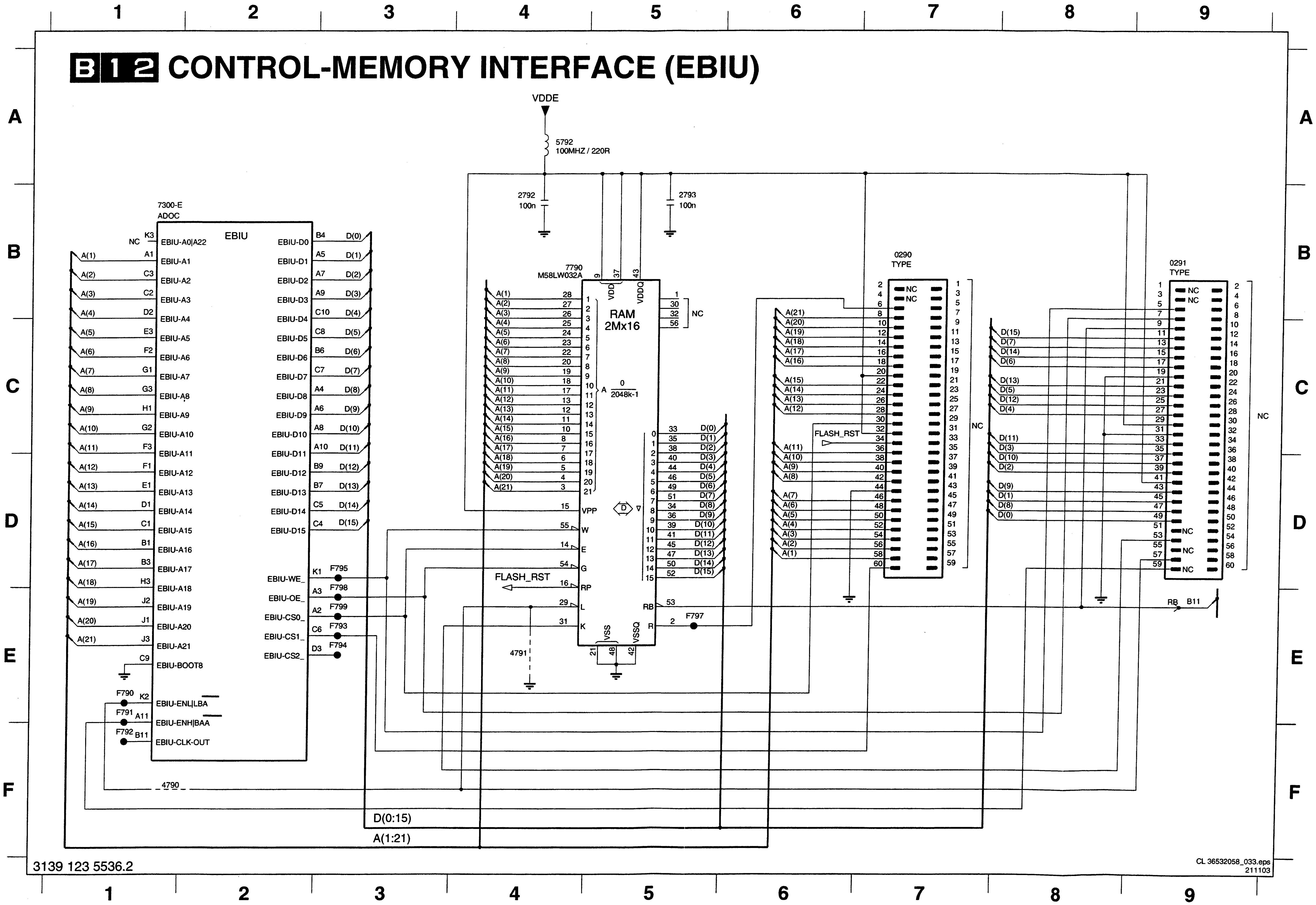
Small Signal Board: Control

0201	A10
0202	A10
1581	C5
1582	E4
2514	B1
2516	C1
2525	C3
2546	C9
2557	C9
2571	E7
2581	C4
2582	C4
2583	D5
2584	D5
3501	A3
3502	A4
3503	A2
3504	A2
3507	B3
3508	B2
3509	B3
3510	B3
3511	B1
3512	B1
3513	B2
3515	B2
3518	A3
3523	C3
3530	E3
3541	A10
3542	A9
3543	B9
3544	A9
3546	B9
3547	C9
3548	B9
3549	B9
3550	A9
3557	C9
3561	D8
3563	D8
3564	D9
3565	D8
3570	E8
3571	E9
3572	E9
3573	E8
3580	C3
3581	C4
3582	E4
3583	E6
3586	E6
3590	D6
4501	E9
4560	D8
4570	E9
4571	E9
4573	E9
5570	E7
5583	D4
6589	C10
7300-A	E8
7300-C	A4
7300-D	A8
7300-K	C6
7525	D2
7581	E5
F508	B1
F509	B1
F510	C10
F511	C10
F512	C10
F513	C10
F514	B10
F515	B10
F516	B9
F517	B9
F518	B9
F519	C10
F520	A9
F521	A9
F522	A9
F523	A9
F524	A4
F527	A1
F532	D2
F533	B7
F534	B3
F537	A4
F538	B3
F539	B7
F540	B7
F541	B7
F542	B7
F543	B7
F544	B7
F550	B9
F551	B3
F570	E7
F582	E5
F584	D6
I501	A1
I502	E6



B11 CONTROL
B17
1 2 3 4 5 6 7 8 9 10
A B C D E
B8-121 POR_FLASH
B12 RB
B18-106 DTV_EXPANSION
B18-107 ON-OFF-LED
B1-7 SEL-IF-LL
B18-108 SOUND-ENABLE
B4-72 IRQ_MPIF
B18-109 SDA0
B18-110 SCL0
SDA1
SCL1
CONNECT TO 3D COMB FILTER
B18-111 COMM_LINE
B4-73 F_REF
P50_INT
VDDE
+5V2
VDDCO
7300-C ADOC
P0-0|INT0
P0-1|INT1
P0-2|INT2
P0-3|INT3
P0-4|INT4
P0-5|INT5
P0-6|INT6
P0-7|MPIF-INT
P1-0|SDA0
P1-1|SCL0
P1-2|SDA1
P1-3|SCL1
P1-4|GPT0-CNT
P1-5|GPT0-GATE
P1-6|GPT0-CAP
P1-7|GPT0-PWM
DCU
UART
GRAPHICS GEN.
GEN CLK BLOCK
MMI
SDRAM
EBIU
E-JTAG
PI-PI BRIDGE
SLOW PI-BUS
FAST PI-BUS
SLAVE GROUP INTERFACE
SRAM CTRL
TIMER
I2C
GPIO
ADC
A/D
SRAM 96KB
SUB-SYSTEM
MIPS-PR1910
P2-0|GPT1-CNT0
P2-1|GPT1-CNT1
P2-2|GPT1-GATE
P2-3|GPT1-CAP0
P2-4|GPT1-CAP1
P2-5|GPT1-PWM
P2-6|RCIN
P2-7|RCOUT
P3-0|RCRXPWR
P3-1|RCCARDET
P3-2
P3-3
7525 M24C64
EEPROM (NVM)
EEPROM
E0 E1 E2 SCL WC_ VCC SDA VSS
7300-K ADOC
RESET-SEL
MPIFCLK
XIN
XOUT
XVDD
XGND
RESET_
XTAL & RESET
1581 CP15C 13.5MHZ
5583 100Mhz / 220R
S5
S6
500mV / div DC 50ns / div
F508
F509
1 V / div DC 500µs / div
1 V / div DC 200µs / div
7581 NE56610-45
MR SUB VCC GND VOUT
1582 SKQR
7300-D ADOC
UART
INTERFACE DEBUGGING
E-JTAG
P3-4|RTS
P3-5|CTS
P3-6|RXD
P3-7|TXD
TRST_
DCLK
PCST2
PCST1
PCST0
TCK
TMS
TDO
TDI
VDDE-JTAG
0202 TYPE
0201 TYPE
RST_JTAG
BAT254
FOR FACTORY & DEVELOPMENT USE ONLY
SEL-2FH-SRC_STATUS3
RC5 B18-113
DEGAUSS B18-114
STAND-BY B18-115
RESET_3D B17-??
7300-A ADOC
ADC-VDDA
ADC-VSSA
ANALOG TO DIGITAL CONVERTER
ADC0 ADC1 ADC2 ADC3 ADC4 ADC5
FOR SERVICE ONLY SDM 4501
KEYBOARD B18-116
FRONT-DETECT B18-117
STATUS1_PIP-AFT_PIP-50-60HZ B18-118
SEL-SVHS-RR_STATUS2 B18-119
LIGHTSENSOR B18-120
SEL-2FH-SRC_STATUS3 B3-53
(TO CONNECTOR 0222) (FOR USE WITH SCART3 ONLY)
FLASH_RST B12
5570 100Mhz / 220R
3139 123 5536.2
CL 36532058_032.eps 211103

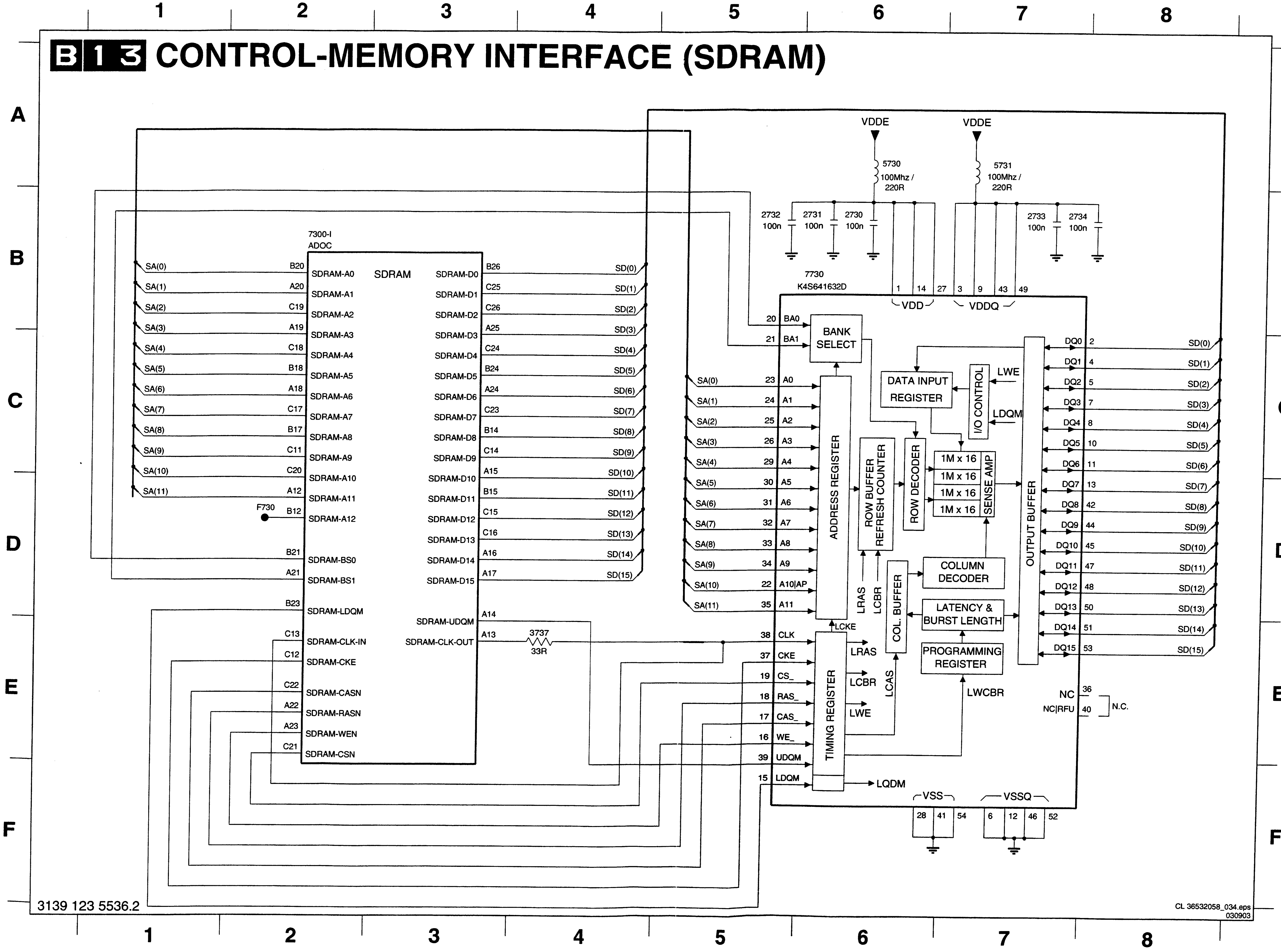
Small Signal Board: Control-Memory Interface (EBIU)


B12 CONTROL-MEMORY INTERFACE (EBIU)
1 2 3 4 5 6 7 8 9
A B C D E F
VDDE
5792 100MHZ / 220R
2792 100n
2793 100n
7300-E ADOC
EBIU
NC K3 EBIU-A0|A22
A(1) A1 EBIU-A1
A(2) C3 EBIU-A2
A(3) C2 EBIU-A3
A(4) D2 EBIU-A4
A(5) E3 EBIU-A5
A(6) F2 EBIU-A6
A(7) G1 EBIU-A7
A(8) G3 EBIU-A8
A(9) H1 EBIU-A9
A(10) G2 EBIU-A10
A(11) F3 EBIU-A11
A(12) F1 EBIU-A12
A(13) E1 EBIU-A13
A(14) D1 EBIU-A14
A(15) C1 EBIU-A15
A(16) B1 EBIU-A16
A(17) B3 EBIU-A17
A(18) H3 EBIU-A18
A(19) J2 EBIU-A19
A(20) J1 EBIU-A20
A(21) J3 EBIU-A21
C9 EBIU-BOOT8
F790 K2 EBIU-ENL|LBA
F791 A11 EBIU-ENH|BAA
F792 B11 EBIU-CLK-OUT
EBIU-D0 B4 D(0)
EBIU-D1 A5 D(1)
EBIU-D2 A7 D(2)
EBIU-D3 A9 D(3)
EBIU-D4 C10 D(4)
EBIU-D5 C8 D(5)
EBIU-D6 B6 D(6)
EBIU-D7 C7 D(7)
EBIU-D8 A4 D(8)
EBIU-D9 A6 D(9)
EBIU-D10 A8 D(10)
EBIU-D11 A10 D(11)
EBIU-D12 B9 D(12)
EBIU-D13 B7 D(13)
EBIU-D14 C5 D(14)
EBIU-D15 C4 D(15)
EBIU-WE_ K1 F795
EBIU-OE_ A3 F798
EBIU-CS0_ A2 F799
EBIU-CS1_ C6 F793
EBIU-CS2_ D3 F794
7790 M58LW032A
RAM 2Mx16
VDD VDDQ 9 37 43
A 0 2048k-1
VPP W E G RP L K
FLASH_RST
4791
VSS VSSQ 21 48 42
RB 53
R 2 F797
NC
0290 TYPE
0291 TYPE
NC
RB B11
4790
D(0:15)
A(1:21)
3139 123 5536.2
CL 36532058_033.eps 211103

0290 B7
0291 B9
2792 B4
2793 B6
4790 F1
4791 E4
5792 A4
7300-E B1
7790 B4
F790 E1
F791 E1
F792 F1
F793 E3
F794 E3
F795 D3
F797 E5
F798 E3
F799 E3

Small Signal Board: Control-Memory Interface (SDRAM)

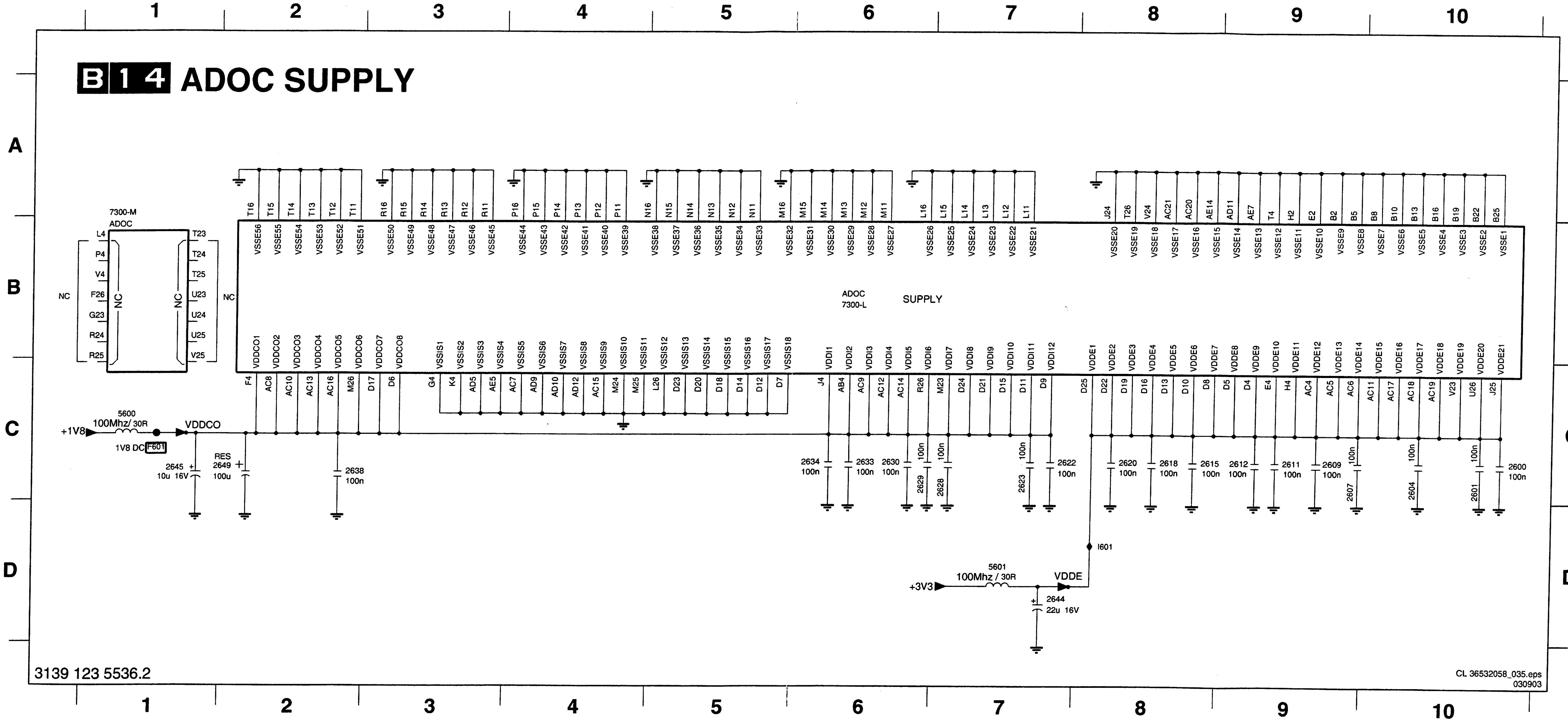
B13 CONTROL-MEMORY INTERFACE (SDRAM)


1
2
3
4
5
6
7
8
A
B
C
D
E
F
VDDE
VDDE
5730
100Mhz /
220R
5731
100Mhz /
220R
2732
100n
2731
100n
2730
100n
2733
100n
2734
100n
7300-I
ADOC
SDRAM
SA(0) B20 SDRAM-A0
SA(1) A20 SDRAM-A1
SA(2) C19 SDRAM-A2
SA(3) A19 SDRAM-A3
SA(4) C18 SDRAM-A4
SA(5) B18 SDRAM-A5
SA(6) A18 SDRAM-A6
SA(7) C17 SDRAM-A7
SA(8) B17 SDRAM-A8
SA(9) C11 SDRAM-A9
SA(10) C20 SDRAM-A10
SA(11) A12 SDRAM-A11
F730 B12 SDRAM-A12
B21 SDRAM-BS0
A21 SDRAM-BS1
B23 SDRAM-LDQM
C13 SDRAM-CLK-IN
C12 SDRAM-CKE
C22 SDRAM-CASN
A22 SDRAM-RASN
A23 SDRAM-WEN
C21 SDRAM-CSN
SDRAM-D0 B26 SD(0)
SDRAM-D1 C25 SD(1)
SDRAM-D2 C26 SD(2)
SDRAM-D3 A25 SD(3)
SDRAM-D4 C24 SD(4)
SDRAM-D5 B24 SD(5)
SDRAM-D6 A24 SD(6)
SDRAM-D7 C23 SD(7)
SDRAM-D8 B14 SD(8)
SDRAM-D9 C14 SD(9)
SDRAM-D10 A15 SD(10)
SDRAM-D11 B15 SD(11)
SDRAM-D12 C15 SD(12)
SDRAM-D13 C16 SD(13)
SDRAM-D14 A16 SD(14)
SDRAM-D15 A17 SD(15)
SDRAM-UDQM A14
SDRAM-CLK-OUT A13
3737
33R
7730
K4S641632D
1 14 27 VDD
3 9 43 49 VDDQ
20 BA0
21 BA1
BANK SELECT
SA(0) 23 A0
SA(1) 24 A1
SA(2) 25 A2
SA(3) 26 A3
SA(4) 29 A4
SA(5) 30 A5
SA(6) 31 A6
SA(7) 32 A7
SA(8) 33 A8
SA(9) 34 A9
SA(10) 22 A10|AP
SA(11) 35 A11
38 CLK
37 CKE
19 CS_
18 RAS_
17 CAS_
16 WE_
39 UDQM
15 LDQM
ADDRESS REGISTER
LCKE
TIMING REGISTER
LRAS
LCBR
LWE
LQDM
ROW BUFFER REFRESH COUNTER
ROW DECODER
DATA INPUT REGISTER
I/O CONTROL
LWE
LDQM
1M x 16
1M x 16
1M x 16
1M x 16
SENSE AMP
COL. BUFFER
LCAS
COLUMN DECODER
LATENCY & BURST LENGTH
PROGRAMMING REGISTER
LWCBR
OUTPUT BUFFER
DQ0 2 SD(0)
DQ1 4 SD(1)
DQ2 5 SD(2)
DQ3 7 SD(3)
DQ4 8 SD(4)
DQ5 10 SD(5)
DQ6 11 SD(6)
DQ7 13 SD(7)
DQ8 42 SD(8)
DQ9 44 SD(9)
DQ10 45 SD(10)
DQ11 47 SD(11)
DQ12 48 SD(12)
DQ13 50 SD(13)
DQ14 51 SD(14)
DQ15 53 SD(15)
NC 36
NC|RFU 40
N.C.
VSS 28 41 54
VSSQ 6 12 46 52
3139 123 5536.2
CL 36532058_034.eps
030903

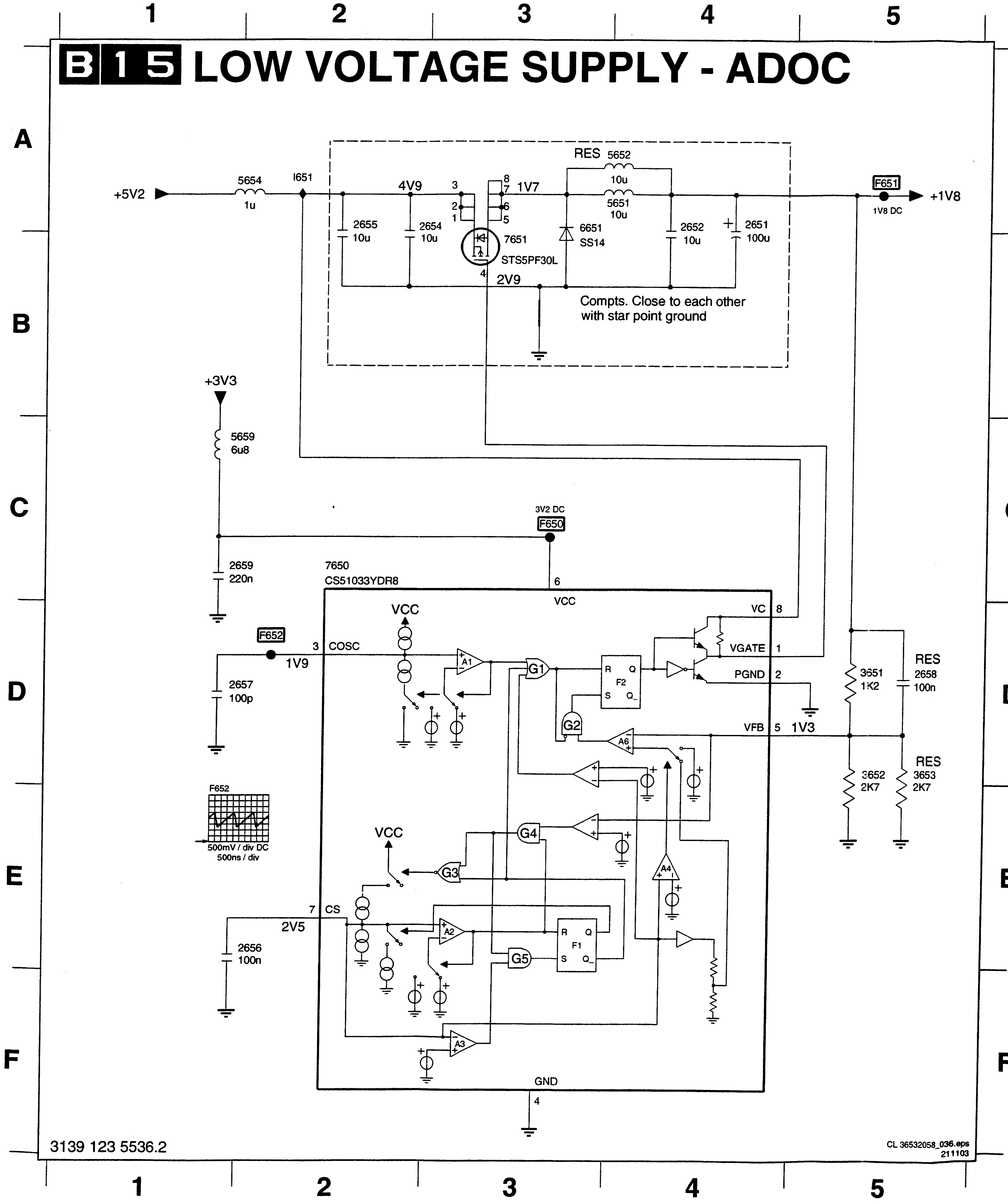
2730 B6
2731 B6
2732 B5
2733 B7
2734 B7
3737 E4
5730 A6
5731 A7
7300-I B2
7730 B6
F730 D2

Small Signal Board: ADOC Supply

2600 C10
2601 C10
2604 C10
2607 C9
2609 C9
2611 C9
2612 C9
2615 C8
2618 C8
2620 C8
2622 C7
2623 C7
2628 C7
2629 C6
2630 C6
2633 C6
2634 C6
2638 C2
2644 D7
2645 C1
2649 C2
5600 C1
5601 D7
7300-L B6
7300-M A1
F601 C1
I601 D8


B14 ADOC SUPPLY
7300-M
ADOC
NC
ADOC
7300-L
SUPPLY
+1V8
5600
100Mhz/ 30R
1V8 DC
F601
VDDCO
2645
10u 16V
RES
2649
100u
2638
100n
2634
2633
2630
2629
2628
2623
2622
2620
2618
2615
2612
2611
2609
2607
2604
2601
2600
100n
I601
+3V3
5601
100Mhz / 30R
VDDE
2644
22u 16V
3139 123 5536.2
CL 36532058_035.eps
030903
1
2
3
4
5
6
7
8
9
10
A
B
C
D

Small Signal Board: Low Voltage Supply ADOC


B15 LOW VOLTAGE SUPPLY - ADOC
1 2 3 4 5
A B C D E F
+5V2
5654
1u
I651
4V9
3
2
1
8
7
1V7
6
5
4
2V9
2655
10u
2654
10u
7651
STS5PF30L
RES 5652
10u
5651
10u
6651
SS14
2652
10u
2651
100u
F651
1V8 DC
+1V8
Compts. Close to each other
with star point ground
+3V3
5659
6u8
3V2 DC
F650
2659
220n
7650
CS51033YDR8
6
VCC
VC 8
VGATE 1
PGND 2
VFB 5 1V3
F652
3 COSC
1V9
2657
100p
VCC
A1
G1
R Q
F2
S Q_
G2
A6
G4
VCC
G3
A4
7 CS
2V5
2656
100n
A2
R Q
F1
S Q_
G5
A3
GND
4
3651
1K2
RES
2658
100n
3652
2K7
RES
3653
2K7
F652
500mV / div DC
500ns / div
3139 123 5536.2
CL 36532058_036.eps
211103

2651	A4
2652	A4
2654	A2
2655	A2
2656	E2
2657	D2
2658	D5
2659	C2
3651	D5
3652	D5
3653	D5
5651	A4
5652	A4
5654	A2
5659	C2
6651	A3
7650	C2
7651	B3
F650	C3
F651	A5
F652	D2
I651	A2

Small Signal Board: Connector Interface

0230	A8
1901	A5
1902	A5
1903	B5
1904	A2
1906	B5
1907	C5
1909	C5
1910	D5
1911	D5
1913	D5
1915	E5
1918	B2
1919	B2
1920	B2
1921	C2
1923	C2
1924	D2
1925	D2
1926	E2
1928	E2
1929	E2
1931	G6
1932	F2
1933	F2
1934	G2
1935	G2
1936	H2
1937	H2
1938	H2
1939	H6
1941	H13
1948	H13
1949	H13
1950	G13
1951	G13
1952	H10
1953	G10
1955	G10
1956	F10
1958	F10
1959	F10
1960	E10
1961	E10
1962	F13
1963	D10
1964	D10
1965	C10
1966	C10
1967	F13
1968	E13
1969	B10
1970	B10
1972	E13
1973	E13
1974	D13
1975	D13
1976	C13
1977	C13
1978	C13
1979	B13
1980	B13
2904	A2
2915	E5
2918	B2
2919	B2
2920	B2
2932	F2
2933	F2
2935	G2
2936	H2
2937	H2
2938	H2
2941	H13
2948	H13
2949	H13
2950	G13
2951	G13
2962	F13
2967	F13
2968	E13
2972	E13
2973	E13
2974	D13
2975	D13
2976	C13
2977	C13
2978	C13
2979	B13
3904	A2
3909	C4
3911	D4
3918	A2
3919	B2
3928	E2
3929	E2
3936	G2
3937	H2
3938	H2
3939	H5
3950	G13
3951	G13
3962	F13
3963	D11
3964	D11
3972	E13
3973	D13
3974	D13
3975	D13
3976	C13
3977	C13
3978	B13
3979	B13
3980	A13
F901	A7
F902	A7
F903	A7
F904	A7
F905	A7
F906	B7
F907	B7
F909	B7
F910	B7
F911	B7
F913	C7
F915	C7
F918	C7
F919	C7
F920	D7
F921	D7
F923	D7
F924	D7
F925	D7
F926	D7
F928	E7
F929	E7
F931	E7
F932	E7
F933	E7
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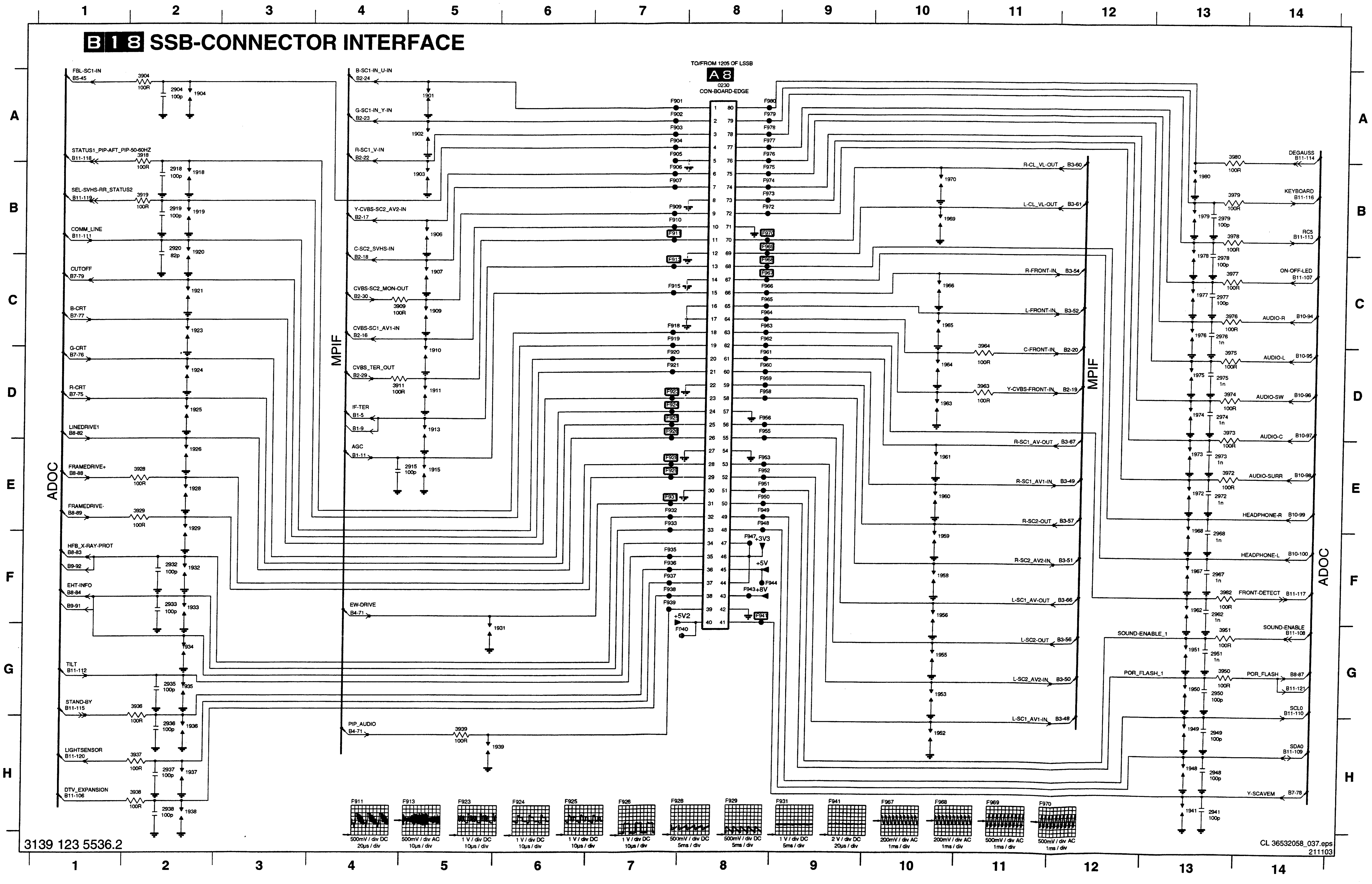
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TO/FROM 1205 OF LSSB
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0230
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1963
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1941
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20µs / div
F913
500mV / div AC
10µs / div
F923
1 V / div DC
10µs / div
F924
1 V / div DC
10µs / div
F925
1 V / div DC
10µs / div
F926
1 V / div DC
10µs / div
F928
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5ms / div
F929
500mV / div DC
5ms / div
F931
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5ms / div
F941
2 V / div DC
20µs / div
F967
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1ms / div
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1ms / div
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1ms / div
F970
500mV / div AC
1ms / div
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Layout SSB (Overview LOT Side)

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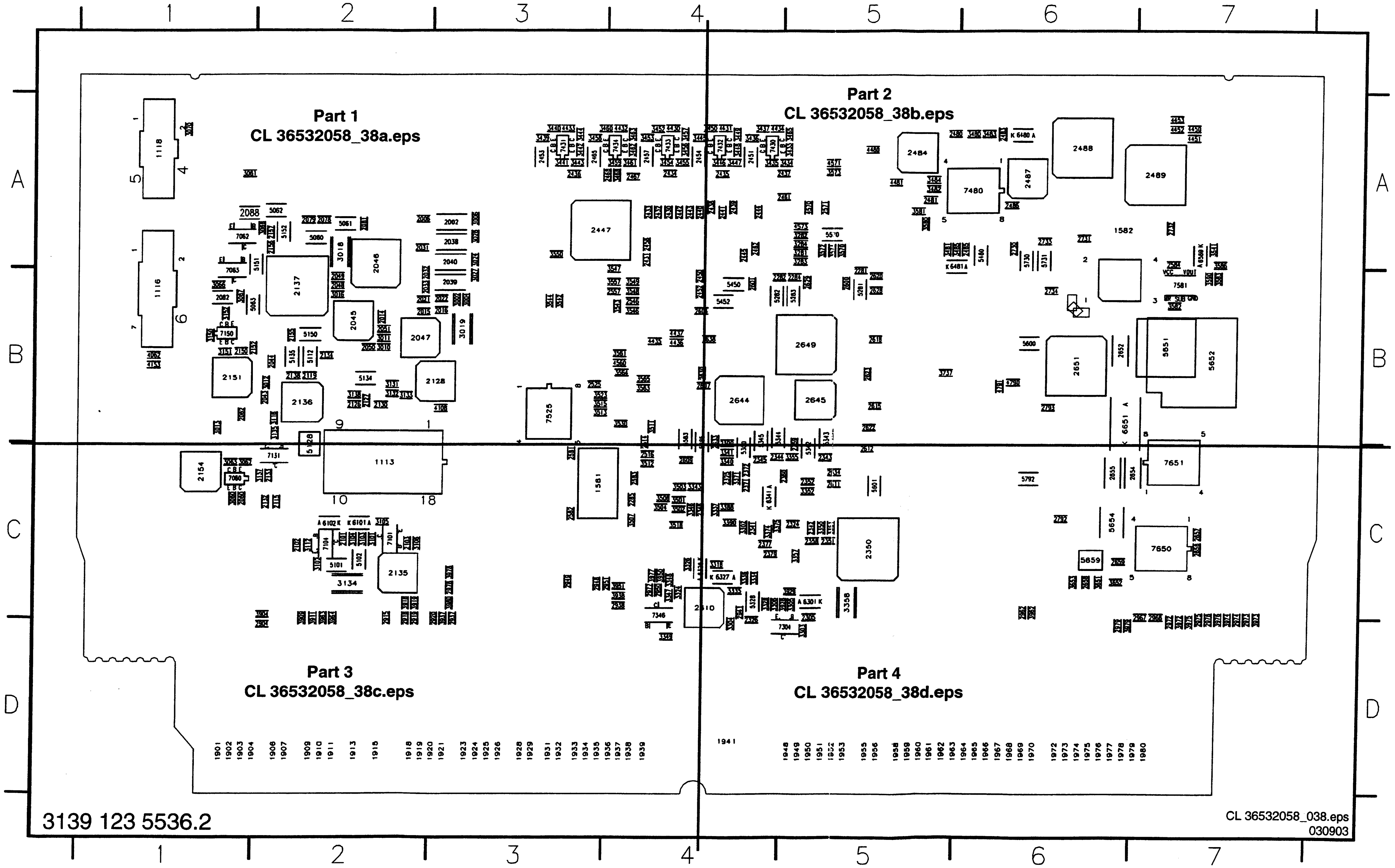

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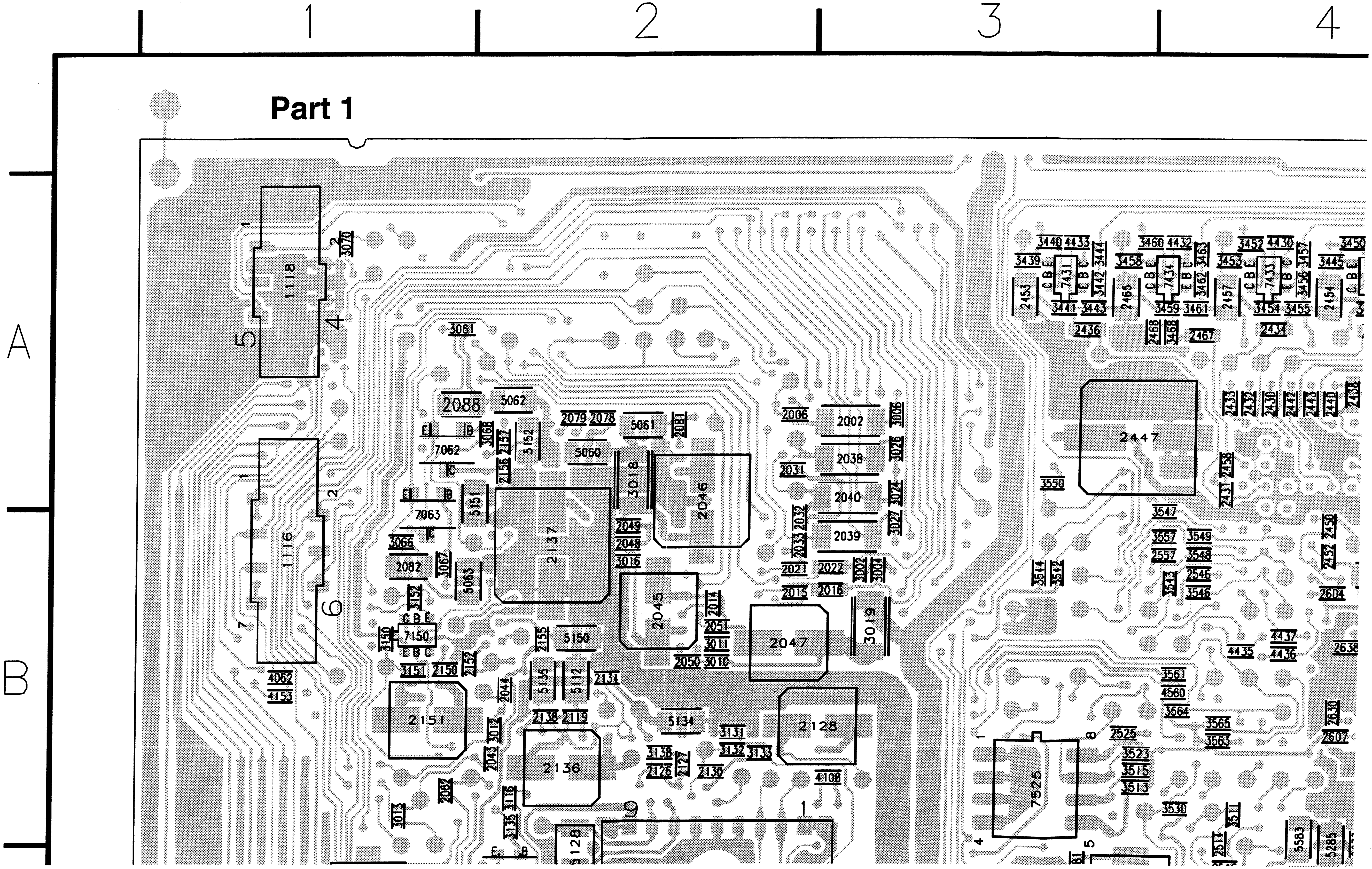
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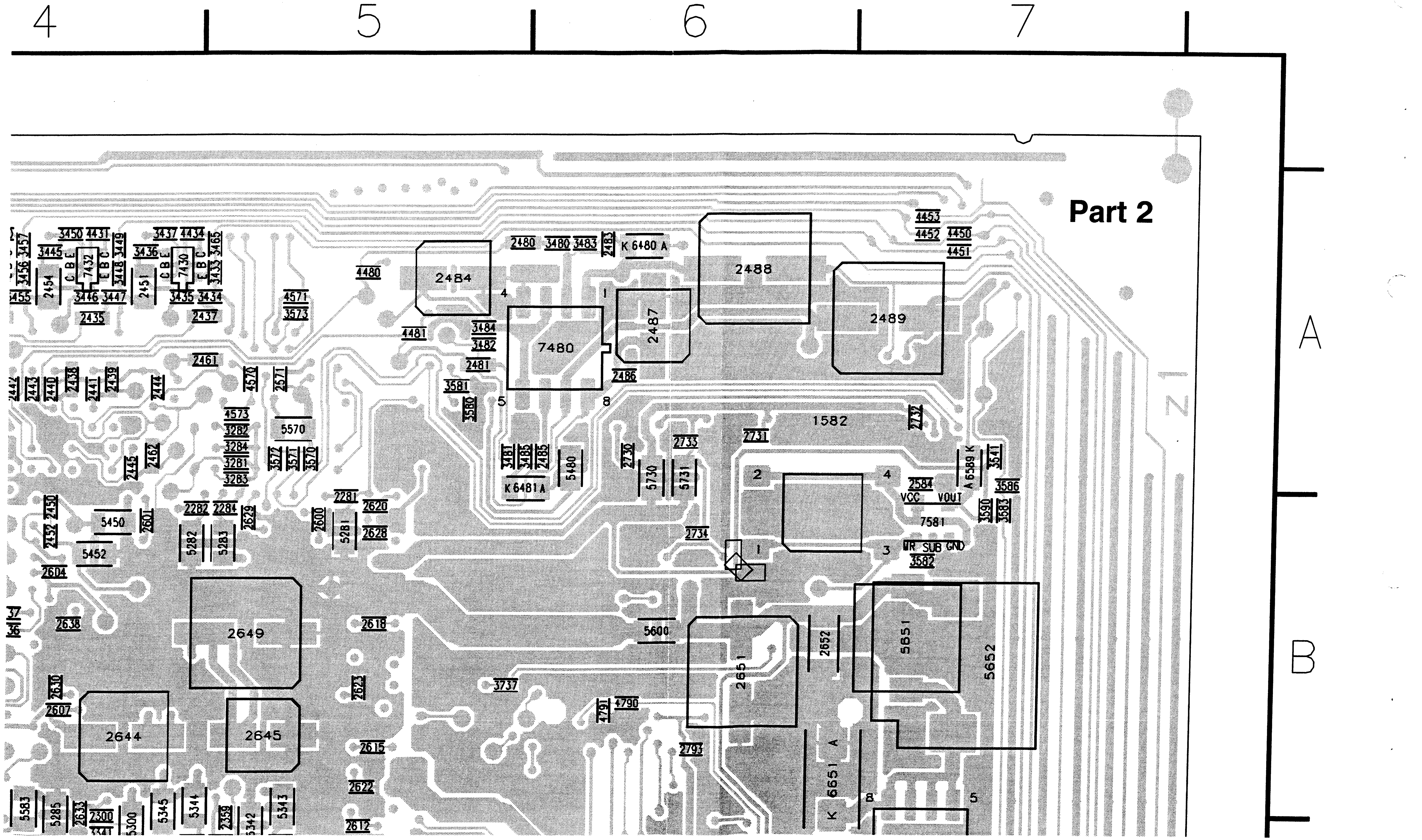
Layout SSB (Part 2 LOT Side)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K 6481 A
K 6651 A
A 6589 K
VCC VOUT
MR SUB GND
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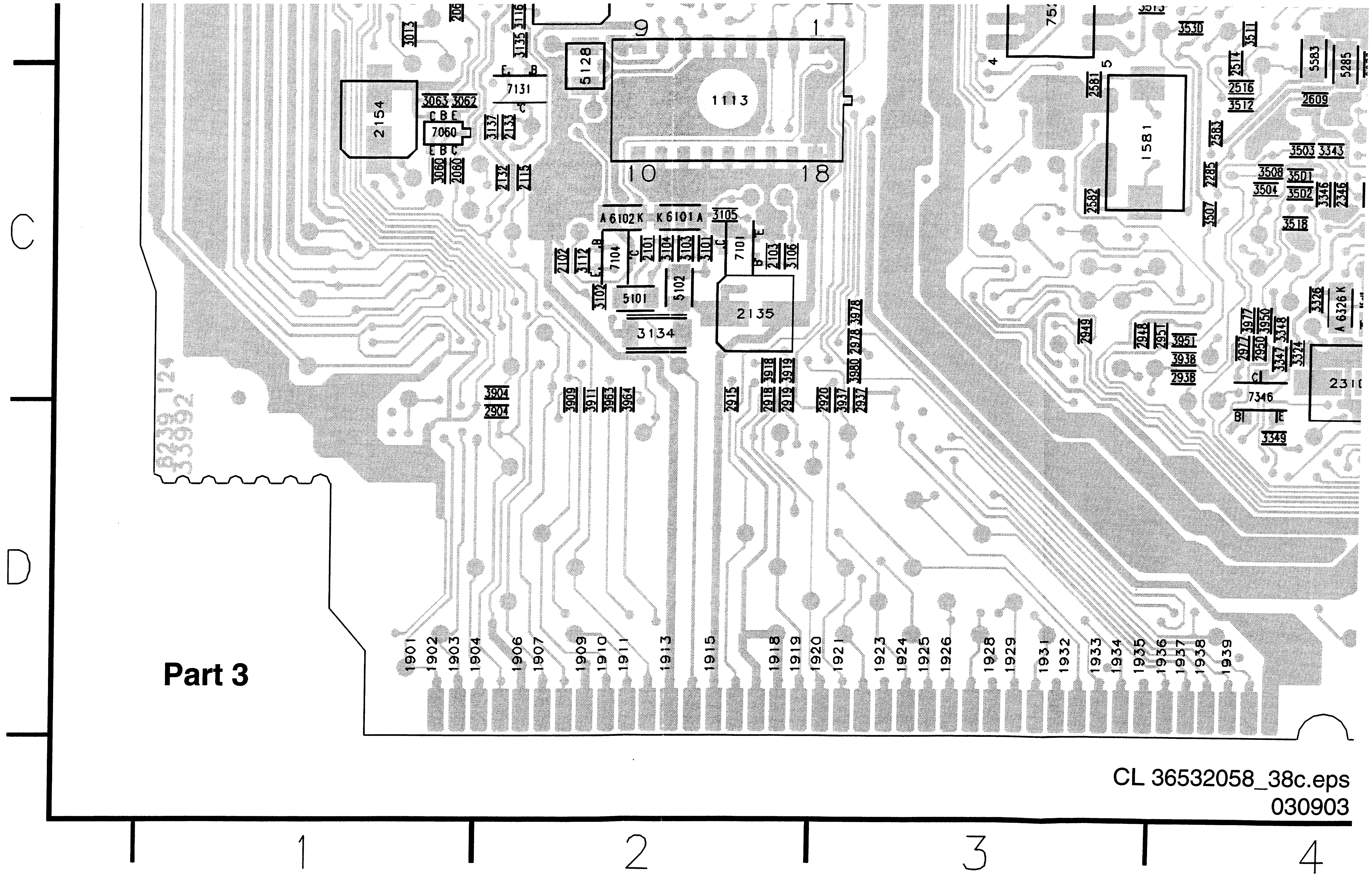
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C
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E B C
3060
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A 6102 K
K 6101 A
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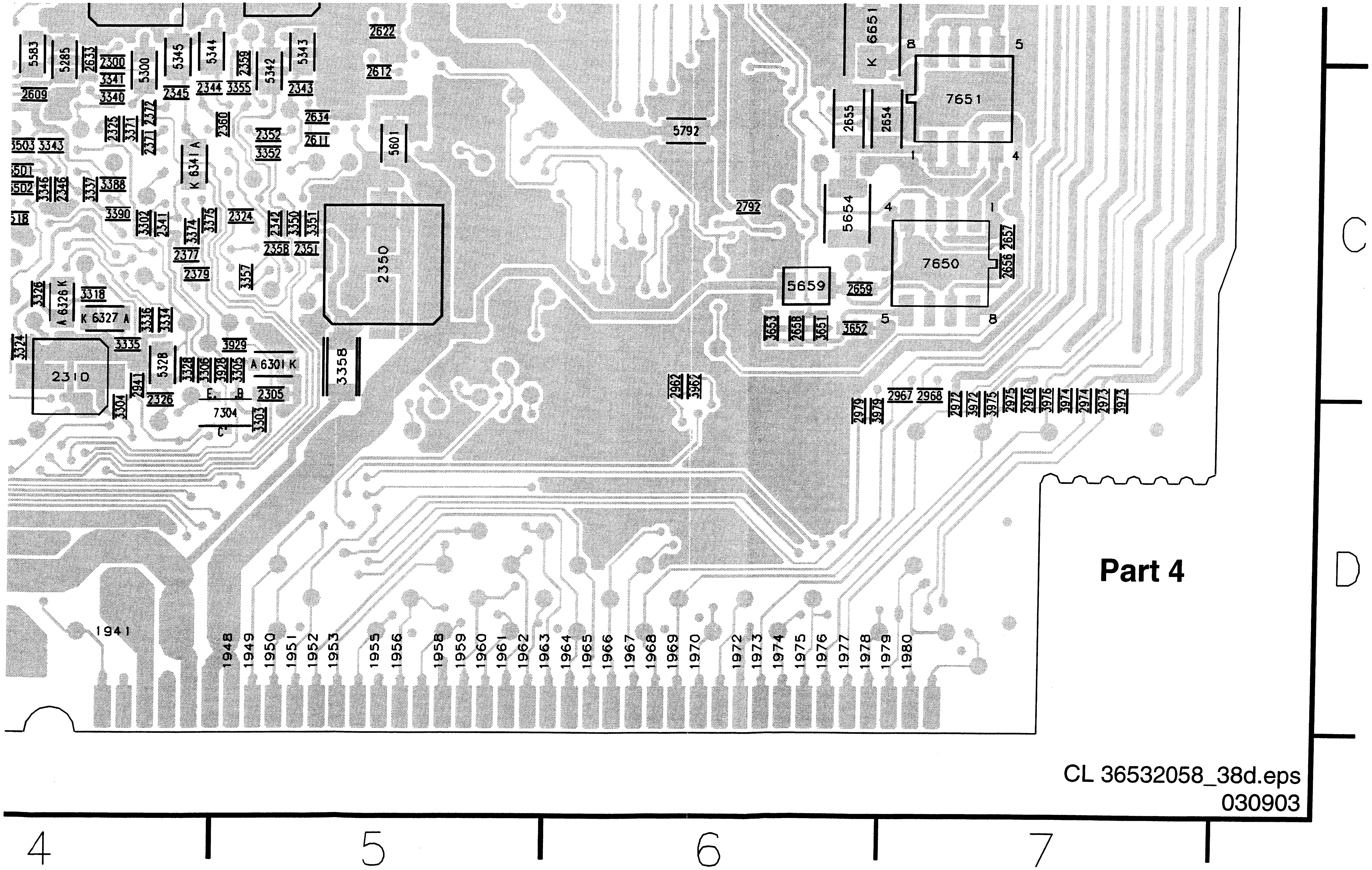
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3928
3305
3929
A 6301 K
3358
2341
3304
2326
E
B
2305
7304
C
3303
5792
2792
2962
3962
6651
K
8
5
7651
2655
2654
1
4
5654
4
1
7650
2657
2656
5659
2659
5
8
3653
2658
3651
3652
2979
3979
2967
2968
2977
3977
3975
2925
2976
3976
3974
2974
2973
3973
1941
1948
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1951
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1973
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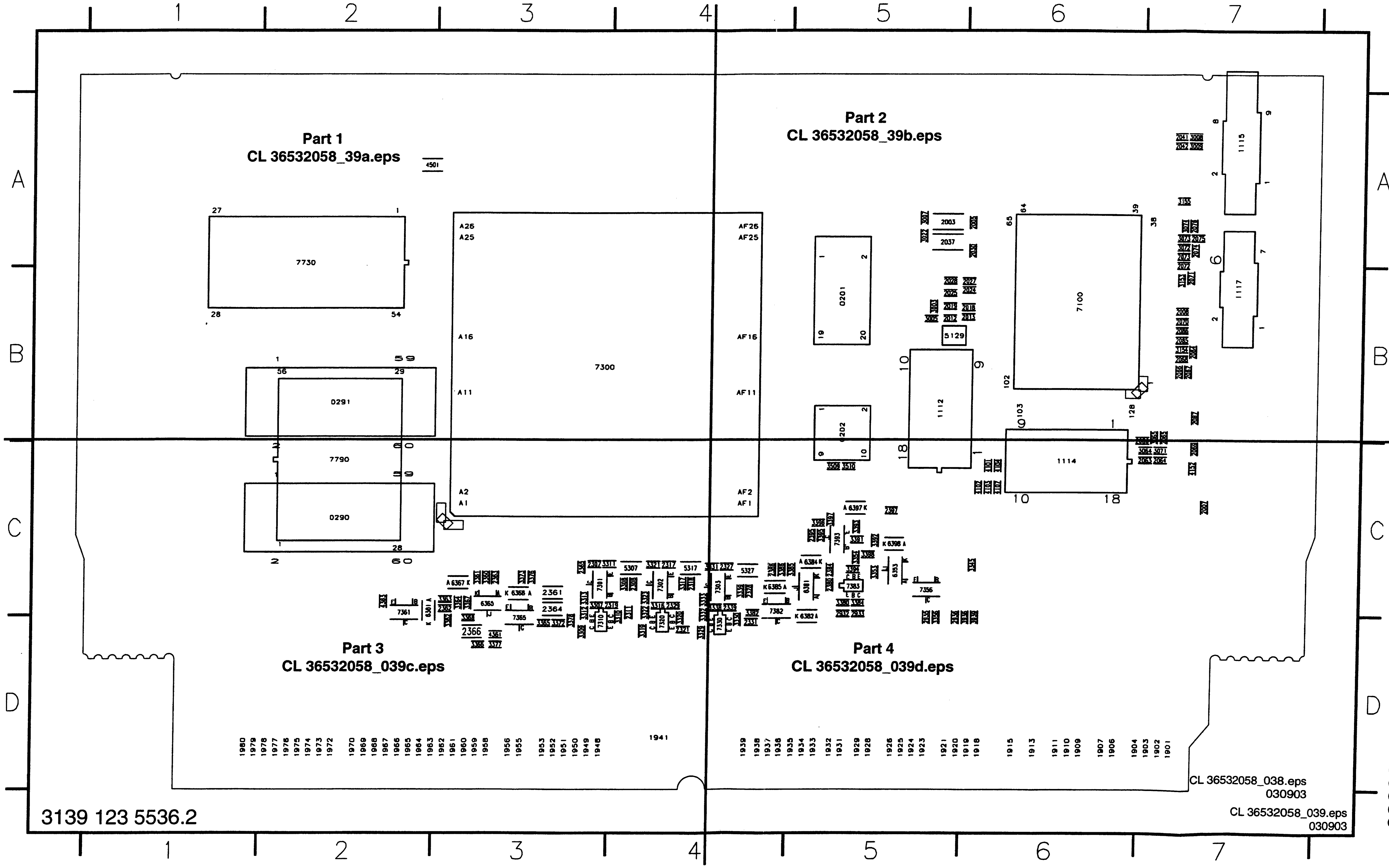
1975
1976
1977
1978
1979
1980
Part 4
C
D
4
5
6
7

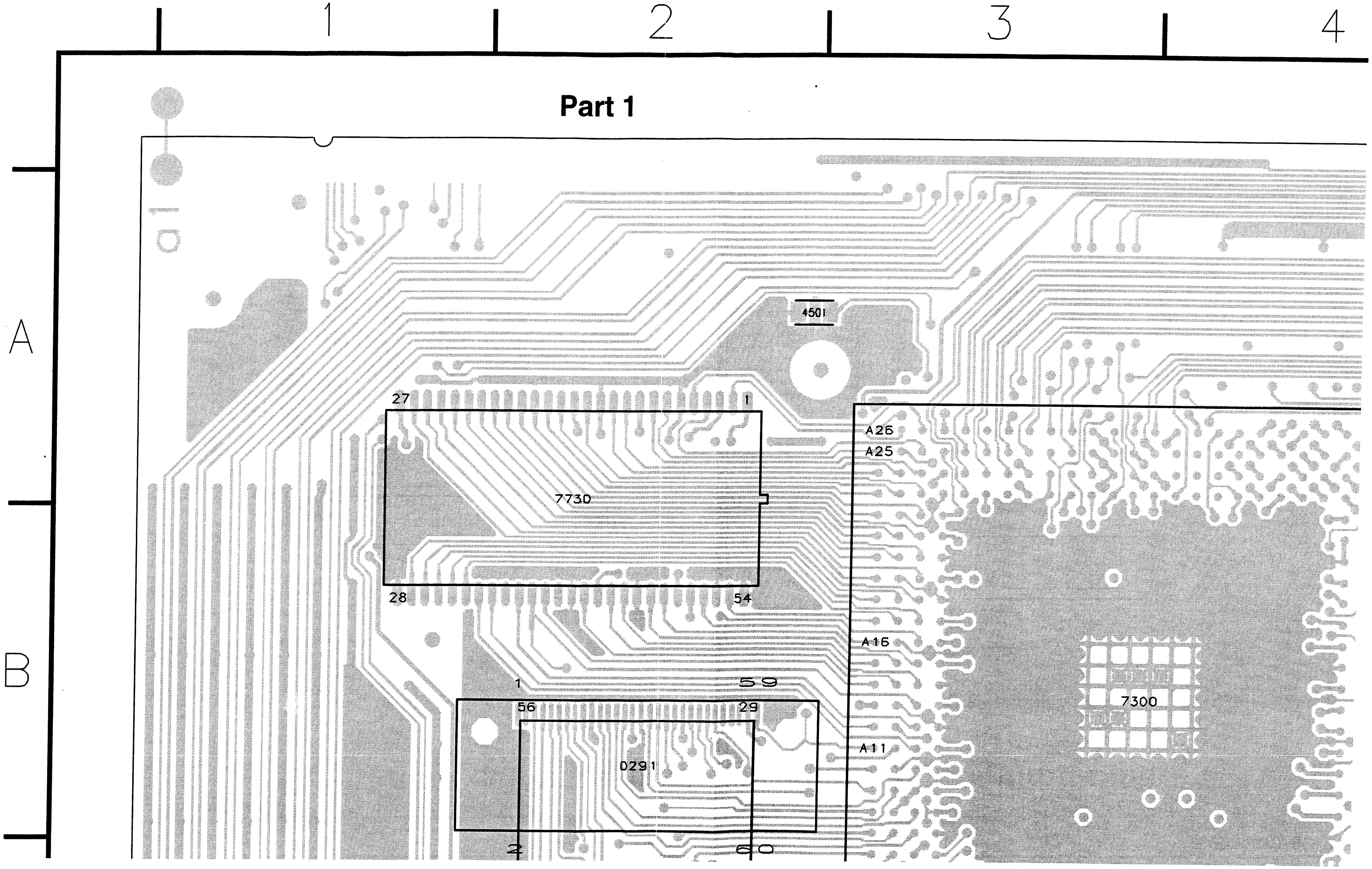
CL 36532058_38d.eps
030903

Layout SSB (Overview Tuner Side)

0201	B5
0202	B5
0290	C2
0291	B2
1112	B5
1114	C6
1115	A7
1117	B7
1901	D7
1902	D7
1903	D7
1904	D6
1906	D6
1907	D6
1909	D6
1910	D6
1911	D6
1913	D6
1915	D6
1918	D6
1919	D6
1920	D5
1921	D5
1923	D5
1924	D5
1925	D5
1926	D5
1928	D5
1929	D5
1931	D5
1932	D5
1933	D5
1934	D5
1935	D5
1936	D4
1937	D4
1938	D4
1939	D4
1941	D4
1948	D3
1949	D3
1950	D3
1951	D3
1952	D3
1953	D3
1955	D3
1956	D3
1958	D3
1959	D3
1960	D3
1961	D3
1962	D3
1963	D2
1964	D2
1965	D2
1966	D2
1967	D2
1968	D2
1969	D2
1970	D2
1972	D2
1973	D2
1974	D2
1975	D2
1976	D2
1977	D2
1978	D2
1979	D1
1980	D1
2003	A5
2005	A6
2007	C7
2008	B7
2012	B5
2013	B6
2018	B6
2019	B5
2024	B6
2025	B5
2027	B6
2028	B5
2030	A6
2037	A5
2041	A7
2042	A7
2063	C7
2064	C7
2065	B7
2066	B7
2067	B7
2068	B7
2069	C7
2070	B7
2071	B7
2072	A7
2073	A7
2074	A7
2075	A7
2076	A7
2083	B7
2084	B7
2085	B7
2086	B7
2087	B7
2307	C3
2308	C4
2311	C4
2317	C4
2318	C4
2319	C4
2321	D4
2327	C4
2328	C4
2329	C4
2331	D4
2339	C4
2361	C3
2362	C3
2363	C3
2364	C3
2365	C3
2366	D3
2380	C5
2384	C5
2386	C4
2395	C5
2397	C5
2932	C5
2933	C5
2935	D5
2936	D5
3003	B5
3005	B5
3007	A5
3008	A7
3009	A7
3022	A5
3064	C7
3065	B7
3071	C7
3072	A7
3073	A7
3074	A7
3153	B7
3154	B7
3155	A7
3307	C3
3308	C4
3309	D3
3310	D4
3311	C3
3312	C3
3313	C3
3316	C4
3317	C4
3319	D4
3320	D4
3321	C4
3322	C4
3323	C4
3329	D4
3330	D4
3331	C4
3332	C4
3333	C4
3338	C4
3339	C4
3345	C6
3353	C5
3354	C5
3356	D5
3360	C3
3361	C3
3362	D3
3363	C3
3364	C3
3365	D3
3366	D3
3367	C3
3368	D3
3372	D3
3373	C3
3376	C3
3377	D3
3378	D3
3380	C5
3382	C4
3384	C5
3385	C5
3386	C4
3391	C5
3392	C5
3393	C5
3394	C5
3395	C5
3396	C5
3397	C5
3398	C5
3509	C5
3510	C5
3936	D6
3939	D6
4101	C6
4102	C6
4103	C6
4104	C6
4107	C6
4152	C7
4361	D3
4363	C2
4501	A2
5129	B5
5307	C4
5317	C4
5327	C4
6353	C5
6361	C2
6365	C3
6367	C3
6368	C3
6381	C5
6382	D5
6384	C5
6385	C4
6397	C5
6398	C5
7100	B6
7300	B3
7301	C3
7302	C4
7303	C4
7310	D3
7320	D4
7330	D4
7356	C5
7361	C2
7365	D3
7382	C4
7383	C5
7393	C5
7730	A2
7790	C2

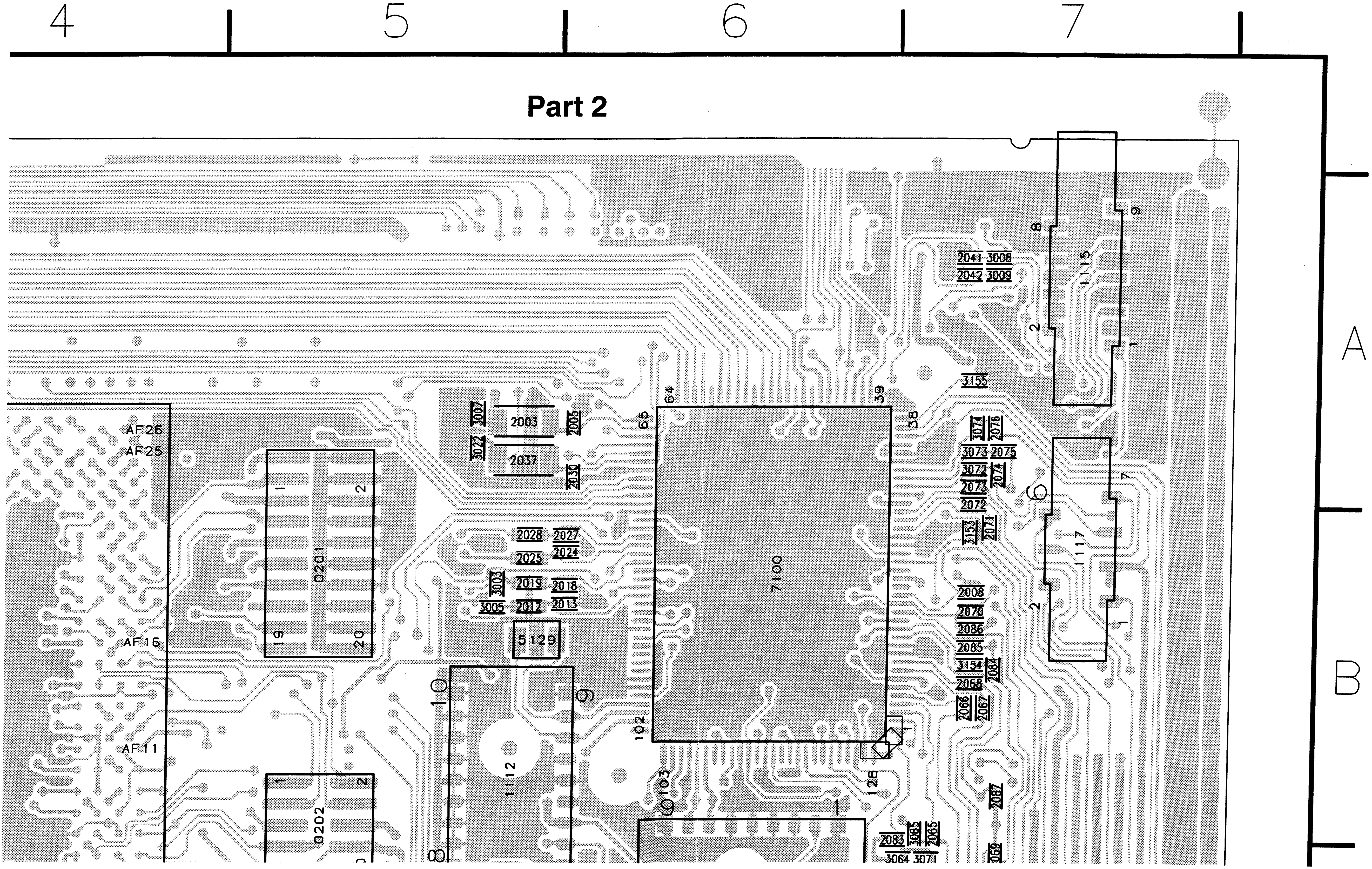

1
2
3
4
5
6
7
A
B
C
D
Part 1
CL 36532058_39a.eps
Part 2
CL 36532058_39b.eps
Part 3
CL 36532058_039c.eps
Part 4
CL 36532058_039d.eps
7730
7300
0291
7790
0290
0201
0202
1112
1114
1115
1117
7100
5129
4501
1941
3139 123 5536.2
CL 36532058_038.eps
030903
CL 36532058_039.eps
030903

Layout SSB (Part 1 Tuner Side)


1
2
3
4
A
B
Part 1
4501
27
1
7730
28
54
A26
A25
A16
A11
1
59
56
29
0291
7300
2
60

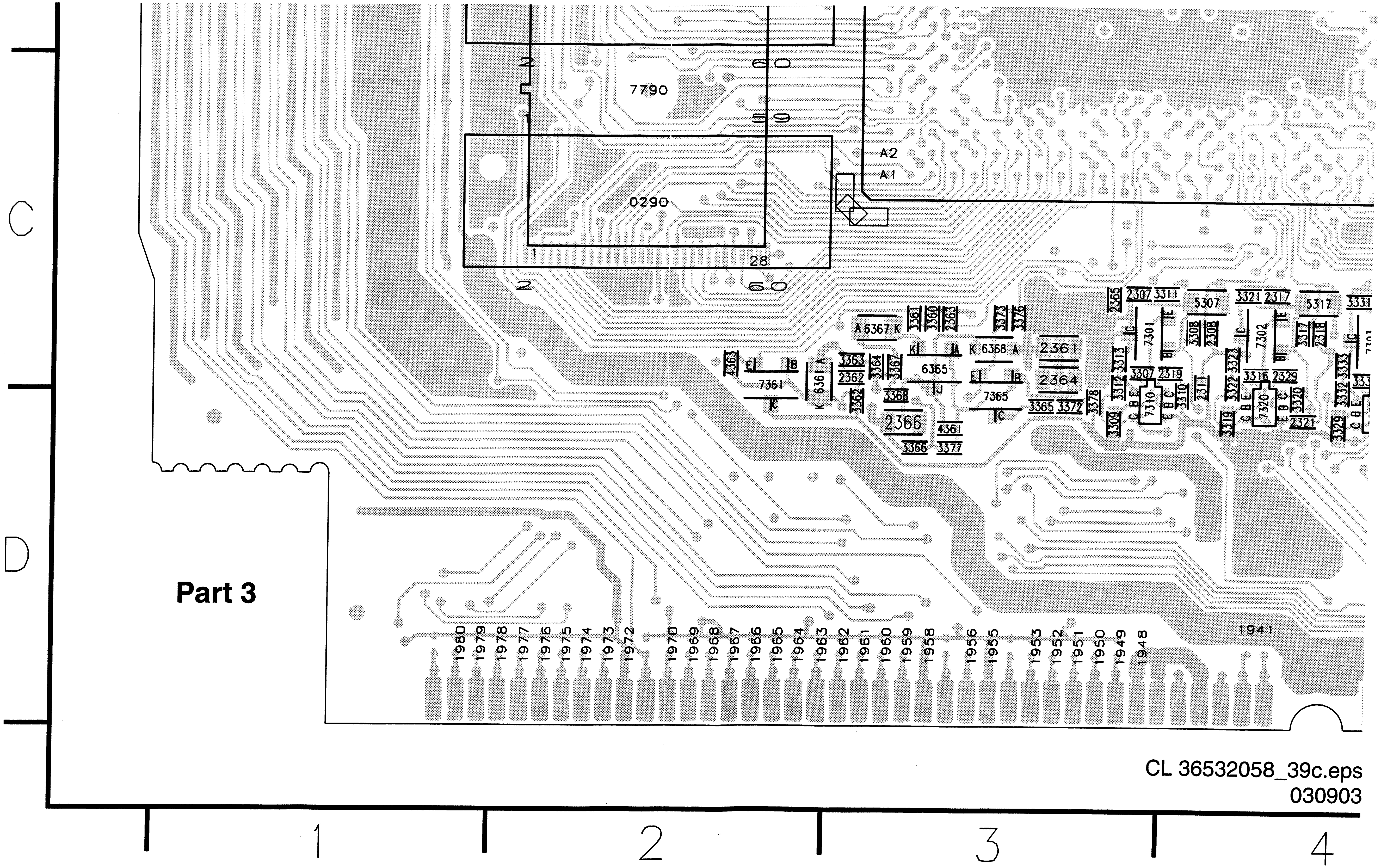
CL 36532058_39a.eps
030903

Layout SSB (Part 2 Tuner Side)


4
5
6
7
A
B
Part 2
AF26
AF25
AF16
AF11
0201
0202
1112
7100
1115
1117
5129
2003
2037
3007
3022
2005
2030
2028
2027
2025
2024
3003
2019
2018
3005
2012
2013
2041
3008
2042
3009
3155
3073
2075
3072
2074
2073
2072
3153
2071
2076
2008
2070
2086
2085
3154
2084
2068
2066
2067
2087
2083
3063
2065
3064
3071
2069
64
39
65
38
102
103
128
1
2
8
9
10
19
20

CL 36532058_39b.eps
030903

Layout SSB (Part 3 Tuner Side)


C
D
1
2
3
4
Part 3
7790
0290
A2
A1
2
60
59
1
28
6367
6368
6365
6361
7361
7365
2361
2364
2366
4361
3366
3377
3365
3372
3368
3363
2362
3362
3364
3367
2363
3361
3360
3373
3376
2307
3311
5307
3321
2317
5317
3331
7301
7302
7310
7320
3307
2319
3316
2329
2321
1980
1979
1978
1977
1976
1975
1974
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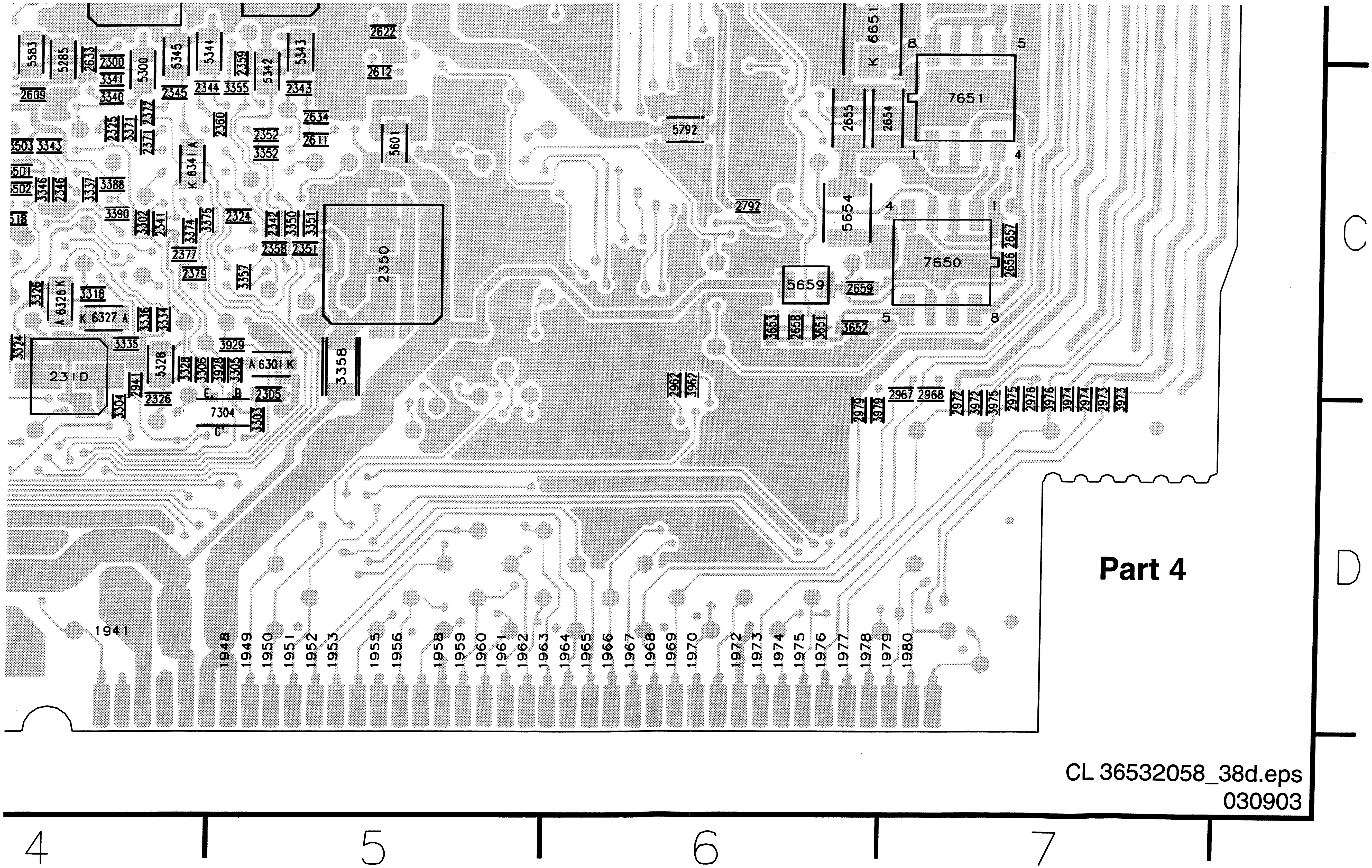
1961
1960
1959
1958
1956
1955
1953
1952
1951
1950
1949
1948
1941

CL 36532058_39c.eps
030903

Layout SSB (Part 4 Tuner Side)


5583
5285
2633
2300
3341
3340
5300
5345
5344
2359
5342
5343
2609
2345
2344
3355
2343
2622
2612
2634
2611
2326
3371
2372
2371
2360
2352
3352
5601
3503
3343
K 6341 A
3501
3502
3346
2346
3337
3388
3390
3302
2341
3374
3375
2324
2342
3350
3351
2377
2358
2351
2379
3357
2350
518
3326
A 6326 K
3318
K 6327 A
3336
3334
3324
3335
3929
2310
5326
3328
3306
3928
3305
A 6301 K
2941
2326
3304
E
B
2305
7304
C
3303
3358
5792
2792
2962
1962
K 6651
8
5
7651
2655
2654
1
4
5654
4
1
7650
2657
2656
5659
2659
5
8
3653
2658
3651
3652
2979
3979
2967
2968
2972
3972
3975
2975
2976
3976
3974
2974
2973
3973
1941
1948
1949
1950
1951
1952
1953
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1956
1958
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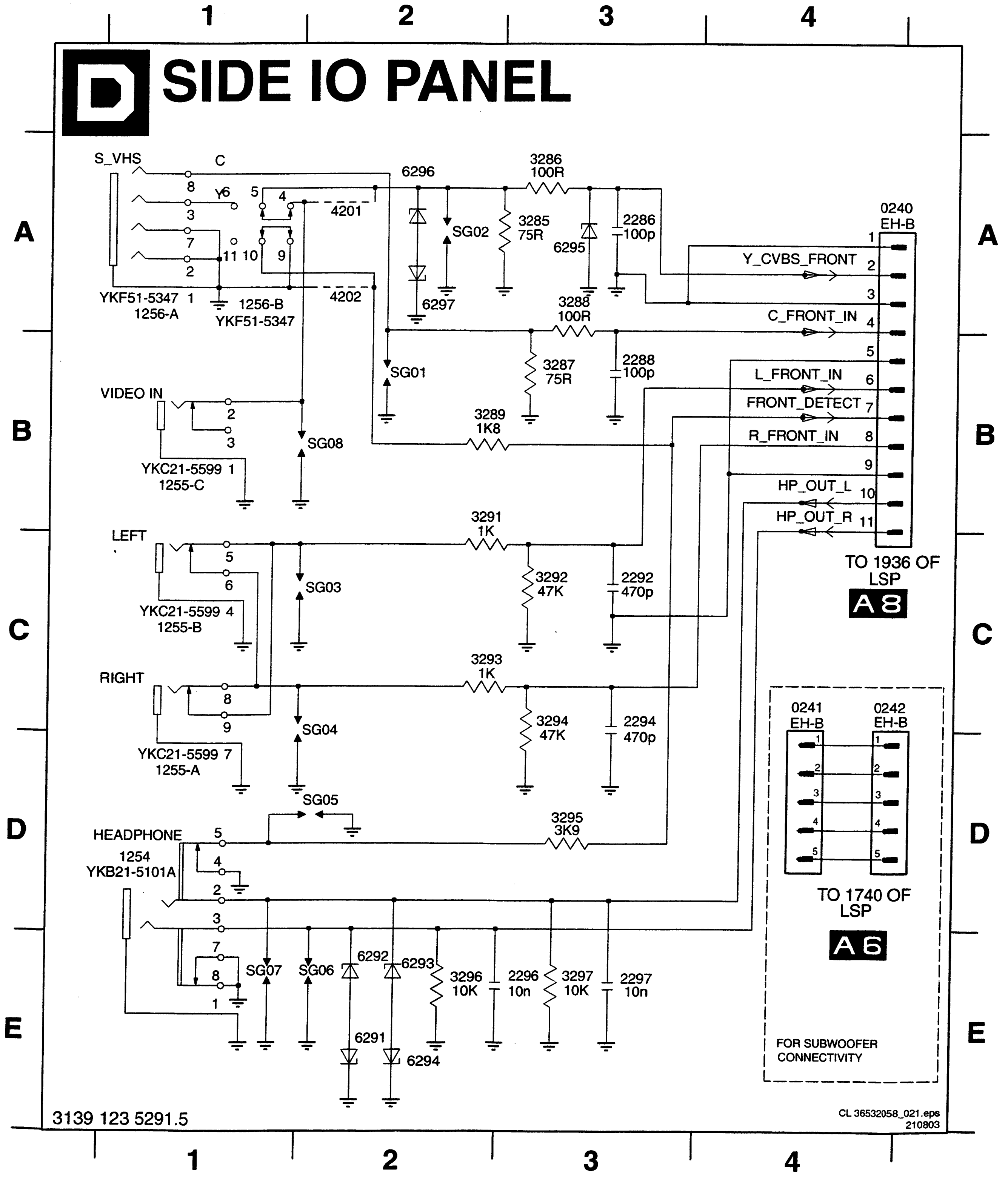
1960
1961
1962
1963
1964
1965
1966
1967
1968
1969
1970
1972
1973
1974
1975
1976
1977
1978
1979
1980
Part 4
C
D
4
5
6
7

CL 36532058_38d.eps
030903

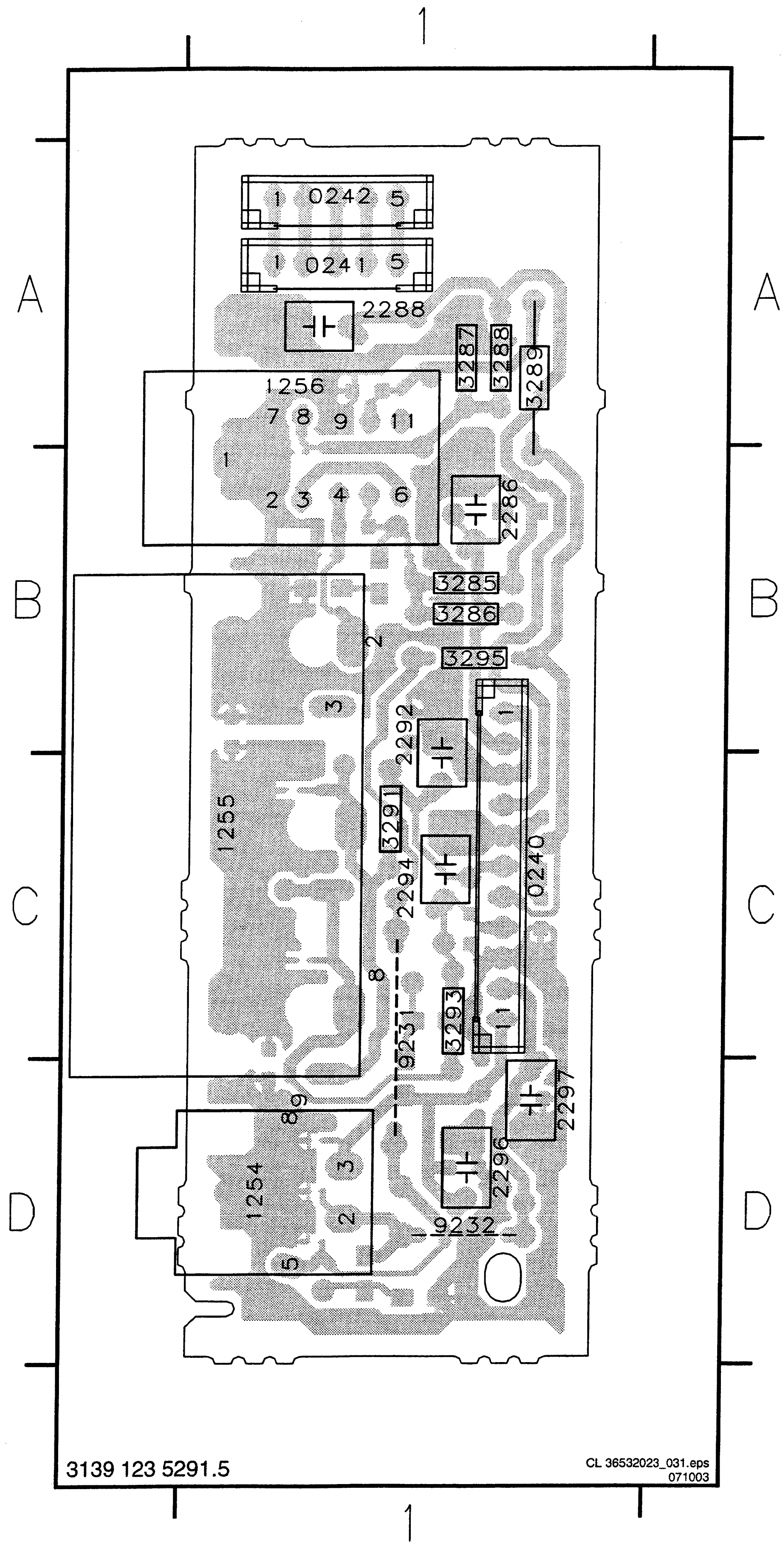
Side I/O Panel

0240	A4
0241	C4
0242	C4
1254	D1
1255-A	D1
1255-B	C1
1255-C	B1
1256-A	A1
1256-B	A1
2286	A3
2288	B3
2292	C3
2294	C3
2296	E3
2297	E3
3285	A3
3286	A3
3287	B3
3288	A3
3289	B2
3291	B2
3292	C3
3293	C2
3294	C3
3295	D3
3296	E2
3297	E3
4201	A2
4202	A2
6291	E2
6292	E2
6293	E2
6294	E2
6295	A3
6296	A2
6297	A2


1
2
3
4
A
B
C
D
E
D
SIDE IO PANEL
S_VHS
C
YKF51-5347 1
1256-A
1256-B
YKF51-5347
4201
4202
6296
3286
100R
SG02
3285
75R
6295
2286
100p
6297
3288
100R
SG01
3287
75R
2288
100p
3289
1K8
0240
EH-B
Y_CVBS_FRONT
C_FRONT_IN
L_FRONT_IN
FRONT_DETECT
R_FRONT_IN
HP_OUT_L
HP_OUT_R
TO 1936 OF
LSP
A8
VIDEO IN
YKC21-5599 1
1255-C
SG08
LEFT
YKC21-5599 4
1255-B
SG03
3291
1K
3292
47K
2292
470p
RIGHT
YKC21-5599 7
1255-A
SG04
3293
1K
3294
47K
2294
470p
SG05
HEADPHONE
1254
YKB21-5101A
3295
3K9
SG07
SG06
6292
6293
3296
10K
2296
10n
3297
10K
2297
10n
6291
6294
0241
EH-B
0242
EH-B
TO 1740 OF
LSP
A6
FOR SUBWOOFER
CONNECTIVITY
3139 123 5291.5
CL 36532058_021.eps
210803

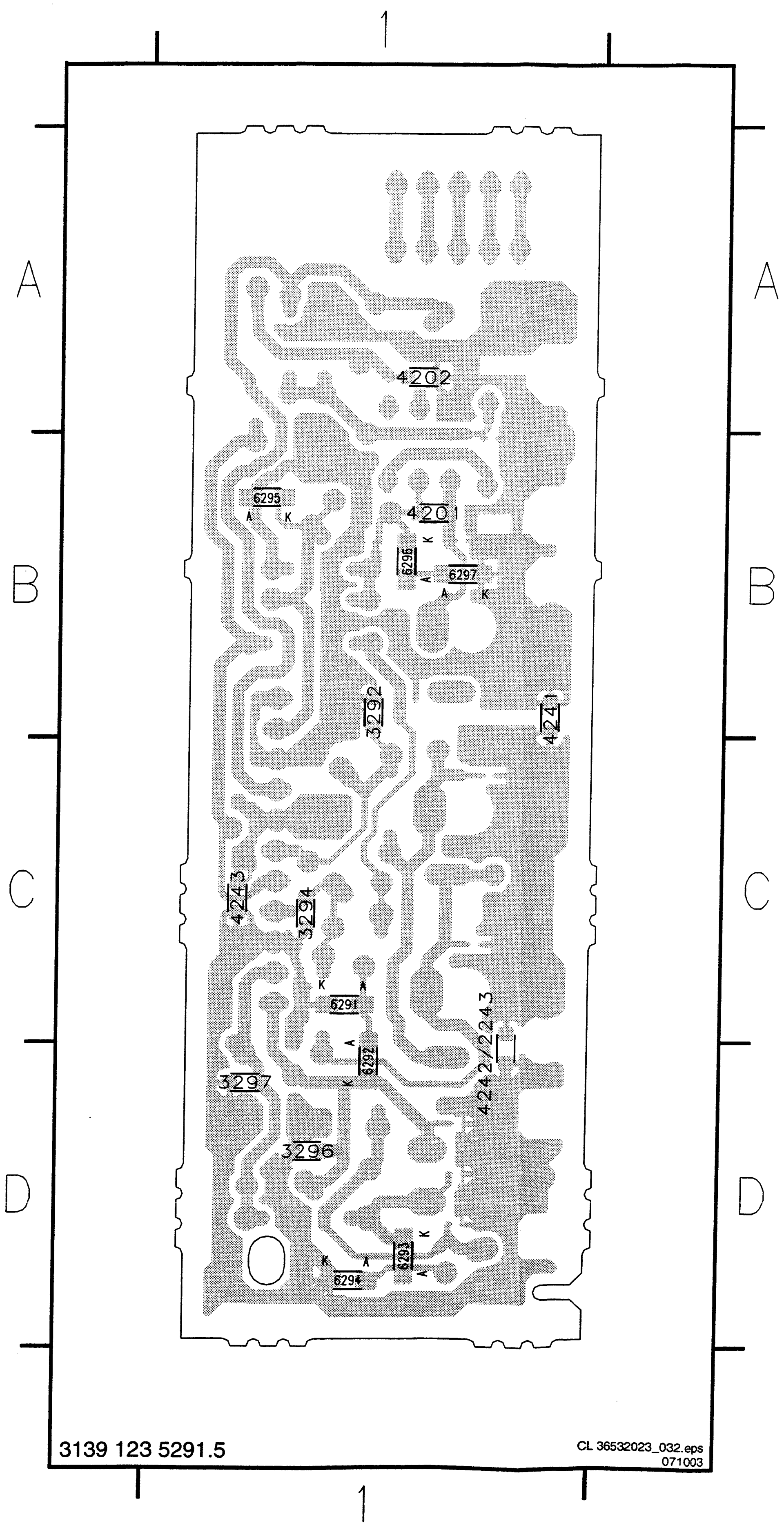
Personal Notes:

Layout Side I/O Panel (Top Side)


1
A
B
C
D
0242
0241
2288
1256
3287
3288
3289
2286
3285
3286
3295
2292
3291
2294
0240
1255
9231
3293
2297
2296
1254
9232
3139 123 5291.5
CL 36532023_031.eps
071003

0240	C1
0241	A1
0242	A1
1254	D1
1255	C1
1256	A1
2286	B1
2288	A1
2292	B1
2294	C1
2296	D1
2297	D1
3285	B1
3286	B1
3287	A1
3288	A1
3289	A1
3291	C1
3293	C1
3295	B1
9231	C1
9232	D1

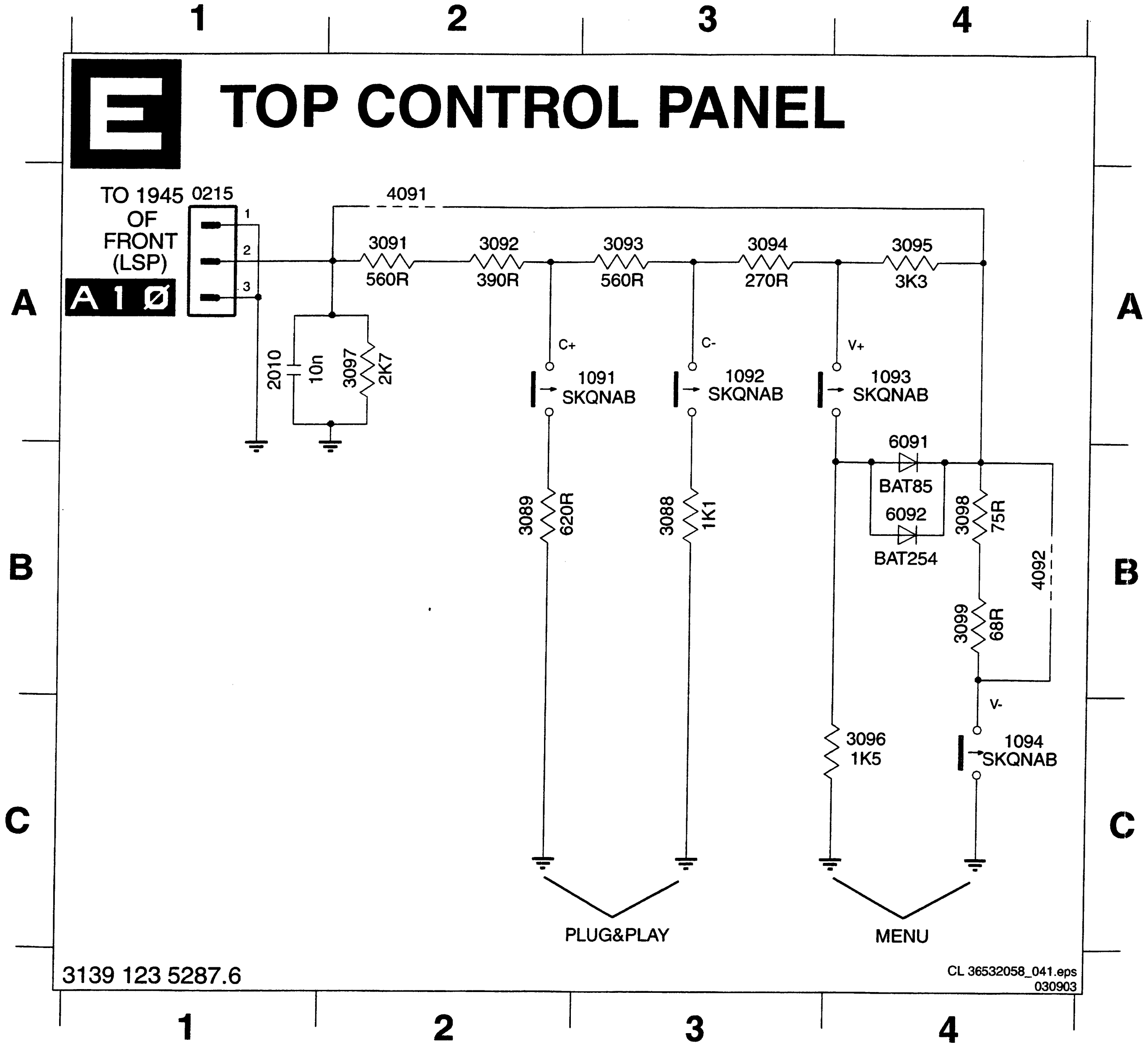
Layout Side I/O Panel (Bottom Side)


1
A
B
C
D
4202
6295
4201
6296
6297
3292
4241
4243
3294
6291
6292
4242/2243
3297
3296
6293
6294
3139 123 5291.5
CL 36532023_032.eps
071003

3292	B1
3294	C1
3296	D1
3297	D1
4201	B1
4202	A1
4241	B1
4242/2243	D1
4243	C1
6291	C1
6292	D1
6293	D1
6294	D1
6295	B1
6296	B1
6297	B1

Top Control Panel

0215 A1	1092 A3	1094 C4	3088 B3	3091 A2	3093 A3	3095 A4	3097 A2	3099 B4	4092 B4	6092 B4
1091 A3	1093 A4	2010 A1	3089 B2	3092 A2	3094 A3	3096 C4	3098 B4	4091 A2	6091 B4	

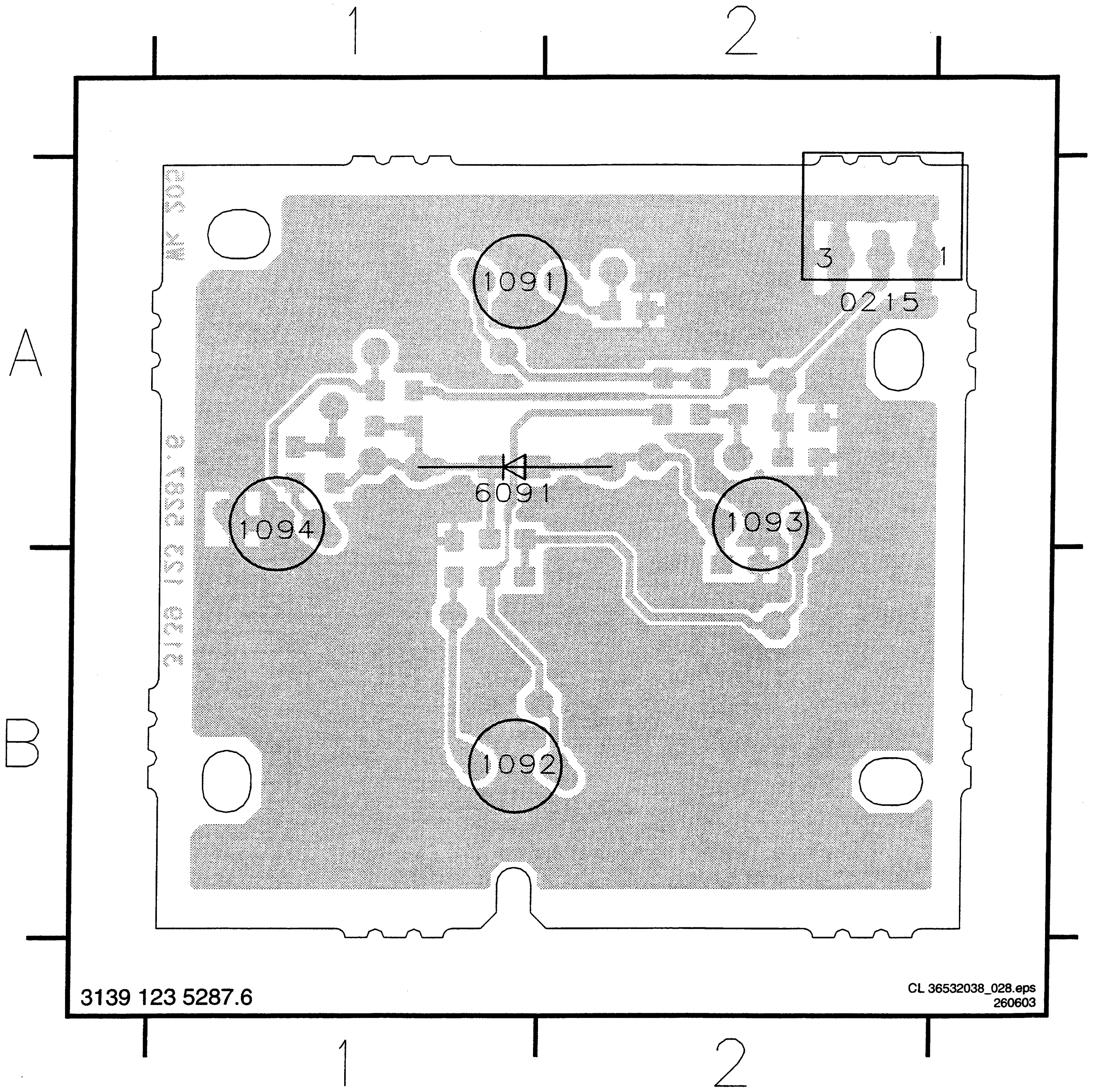


1
2
3
4
E
TOP CONTROL PANEL
TO 1945 OF FRONT (LSP)
A10
0215
1
2
3
4091
3091 560R
3092 390R
3093 560R
3094 270R
3095 3K3
2010 10n
3097 2K7
C+
C-
V+
1091 SKQNAB
1092 SKQNAB
1093 SKQNAB
6091 BAT85
6092 BAT254
3089 620R
3088 1K1
3098 75R
3099 68R
4092
V-
3096 1K5
1094 SKQNAB
PLUG&PLAY
MENU
3139 123 5287.6
CL 36532058_041.eps 030903
A
B
C

Personal Notes:

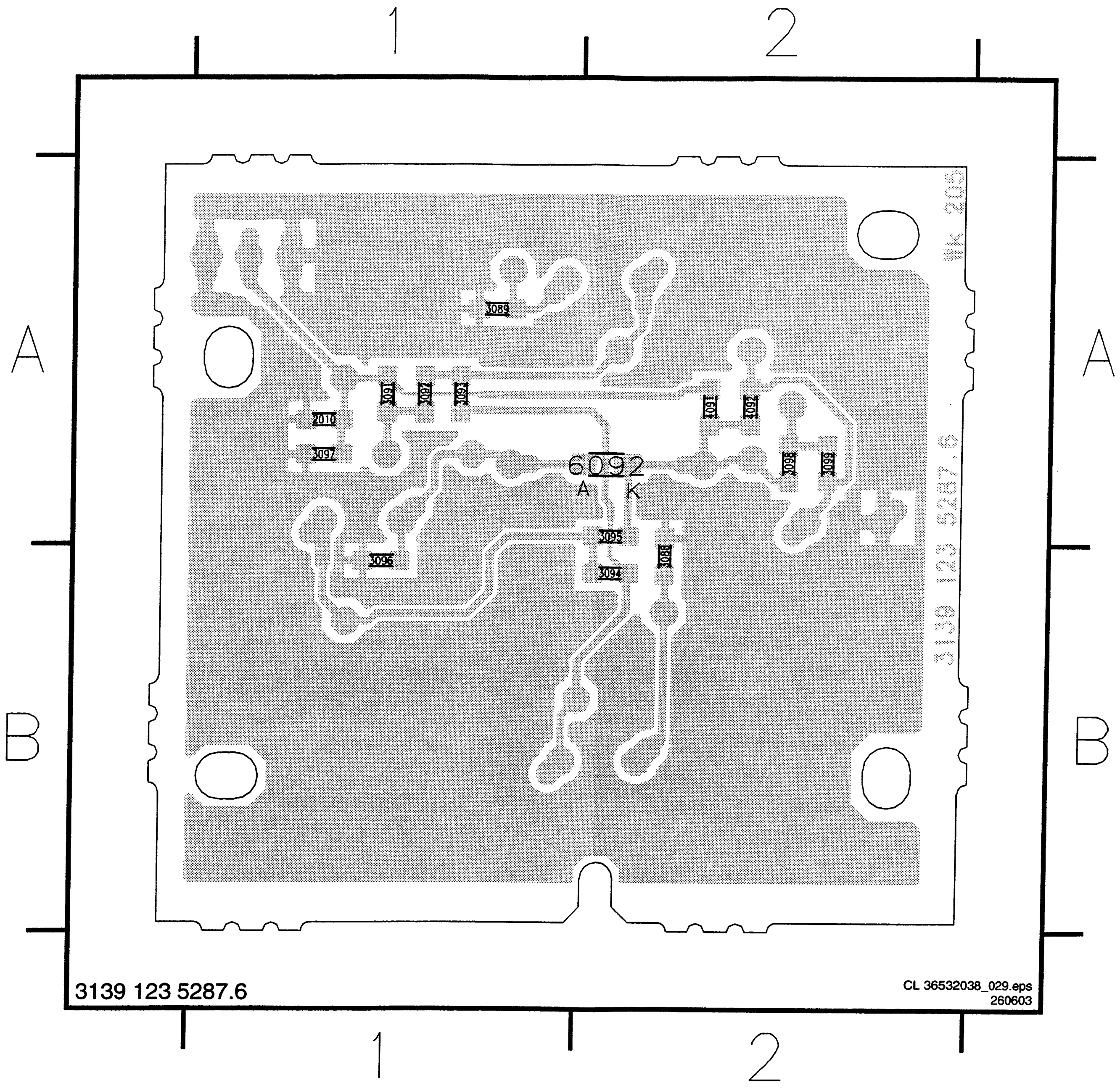
Layout Top Control Panel (Top Side)

0215	A2
1091	A1
1092	B1
1093	A2
1094	A1
6091	A1


1
2
A
B
1091
3
1
0215
6091
1094
1093
1092
3139 123 5287.6
CL 36532038_028.eps
260603

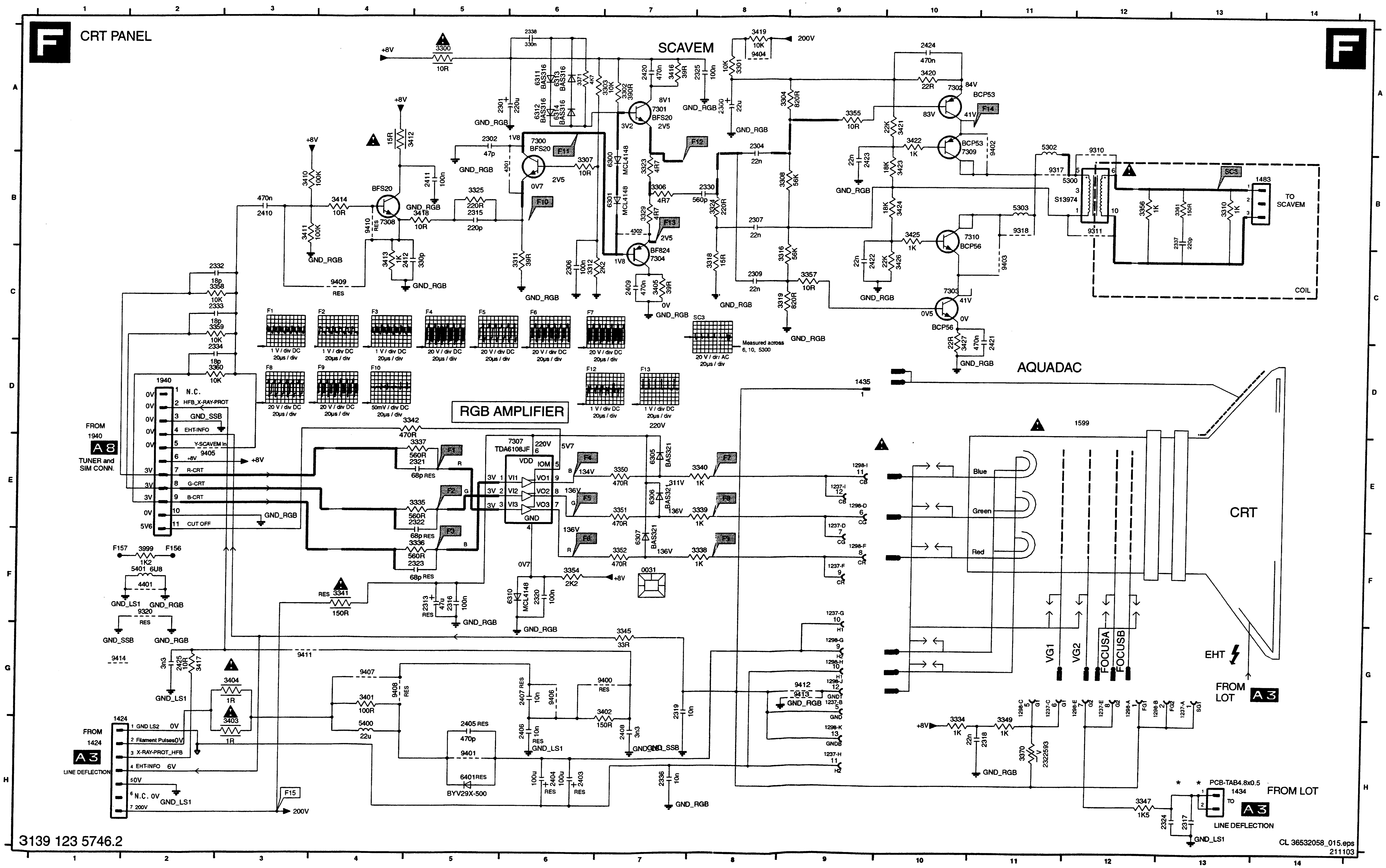
Layout Top Control Panel (Bottom Side)

2010	A1
3088	B2
3089	A1
3091	A1
3092	A1
3093	A1
3094	B2
3095	A2
3096	B1
3097	A1
3098	A2
3099	A2
4091	A2
4092	A2
6092	A2

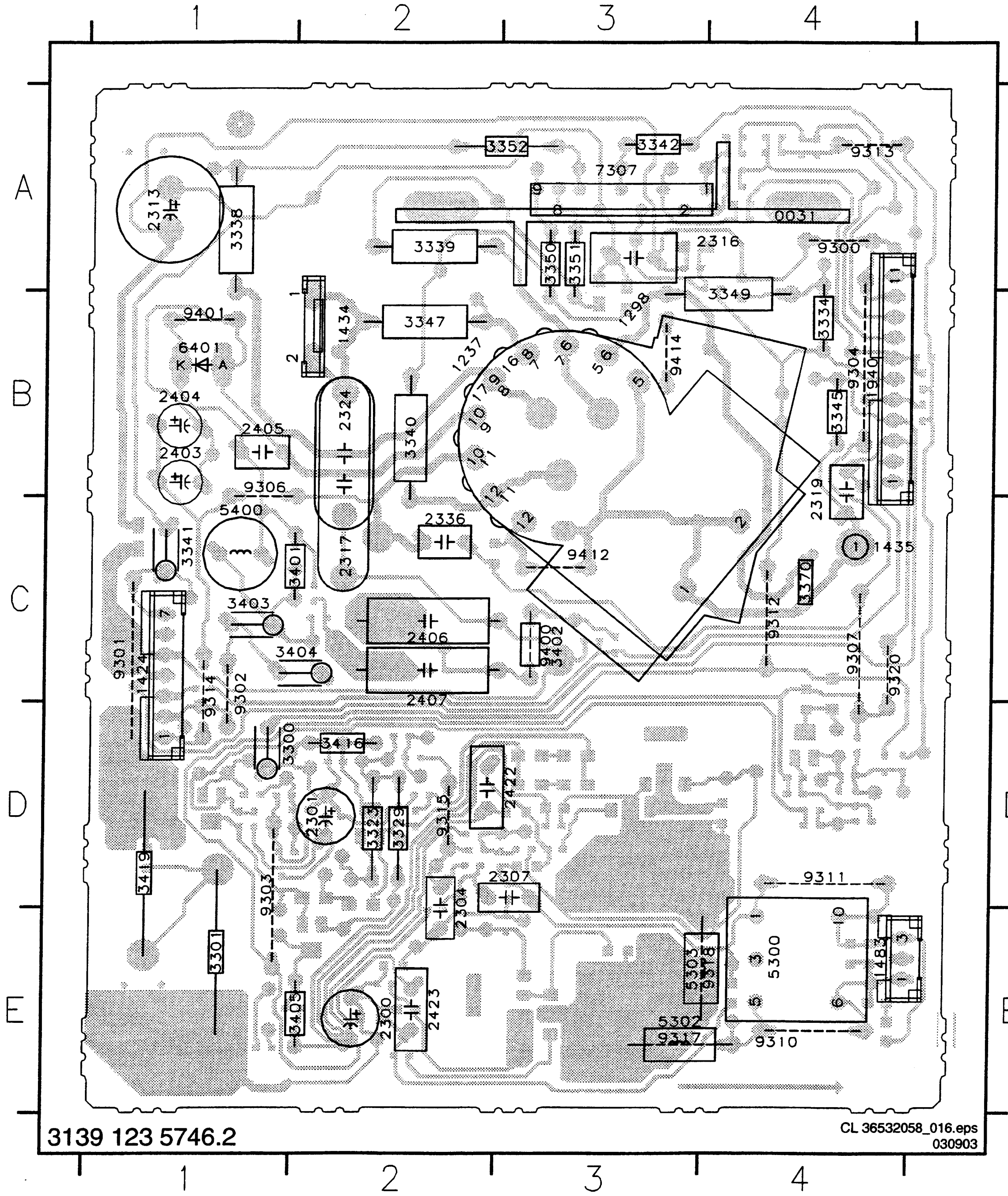

1
2
A
B
3089
3091
3092
3093
2010
3097
4091
4092
3098
3099
6092
A
K
3096
3095
3094
3088
3139 123 5287.6
CL 36532038_029.eps
260603

CRT Panel

0031 F7
1237-A G13
1237-B G9
1237-C G11
1237-D E9
1237-E G12
1237-F F9
1237-G F9
1237-H H9
1237-I E9
1298-A G12
1298-B G12
1298-C G11
1298-D E9
1298-E G12
1298-F F9
1298-G G9
1298-H G9
1298-I E9
1298-J G9
1298-K H9
1424 H2
1434 H13
1435 D9
1483 B13
1940 D2
2300 A8
2301 A5
2302 A5
2304 A8
2306 C6
2307 B8
2309 C8
2313 F5
2315 B5
2316 F5
2317 H13
2318 H11
2319 G7
2320 F6
2321 E5
2322 E5
2323 F5
2324 H13
2325 A8
2330 B8
2332 C2
2333 C2
2334 D2
2336 H7
2337 B13
2338 A6
2403 H6
2404 H6
2405 H5
2406 H6
2407 G6
2408 H7
2409 C7
2410 B3
2411 B5
2412 C4
2420 A7
2421 D11
2422 C9
2423 B9
2424 A10
2425 G2
3300 A5
3301 A8
3302 A7
3303 A7
3304 A8
3306 B7
3307 B6
3308 B8
3310 B13
3311 C6
3312 C6
3316 C8
3318 C8
3319 C8
3323 B7
3324 B8
3325 B5
3329 B7
3334 H10
3335 E5
3336 F5
3337 E5
3338 F8
3339 E8
3340 E8
3341 F4
3342 D5
3345 G7
3347 H12
3349 H11
3350 E7
3351 E7
3352 F7
3354 F6
3355 A9
3356 B12
3357 C9
3358 C2
3359 C2
3360 D2
3361 B13
3370 H11
3371 A6
3401 G4
3402 G7
3403 H3
3404 G3
3405 C7
3410 B3
3411 B3
3412 A4
3413 C4
3414 B4
3416 A7
3417 G2
3418 B5
3419 A8
3420 A10
3421 A10
3422 A10
3423 B10
3424 B10
3425 B10
3426 C10
3427 D10
3999 F2
4301 B5
4302 B7
4401 F2
5300 B11
5302 A11
5303 B11
5400 H4
5401 F2
6300 B7
6301 B7
6305 E7
6306 E7
6307 F7
6310 F6
6311 A6
6312 A6
6313 A6
6314 A6
6401 H5
7300 A6
7301 A7
7302 A10
7303 C10
7304 C7
7307 E6
7308 B4
7309 A10
7310 B10
9310 A12
9311 B12
9317 B11
9318 B11
9320 F2
9400 G7
9401 H5
9402 A11
9403 C11
9404 A8
9405 E2
9406 G6
9407 G4
9408 G4
9409 C4
9410 B4
9411 G3
9412 G9
9413 G9
9414 G1

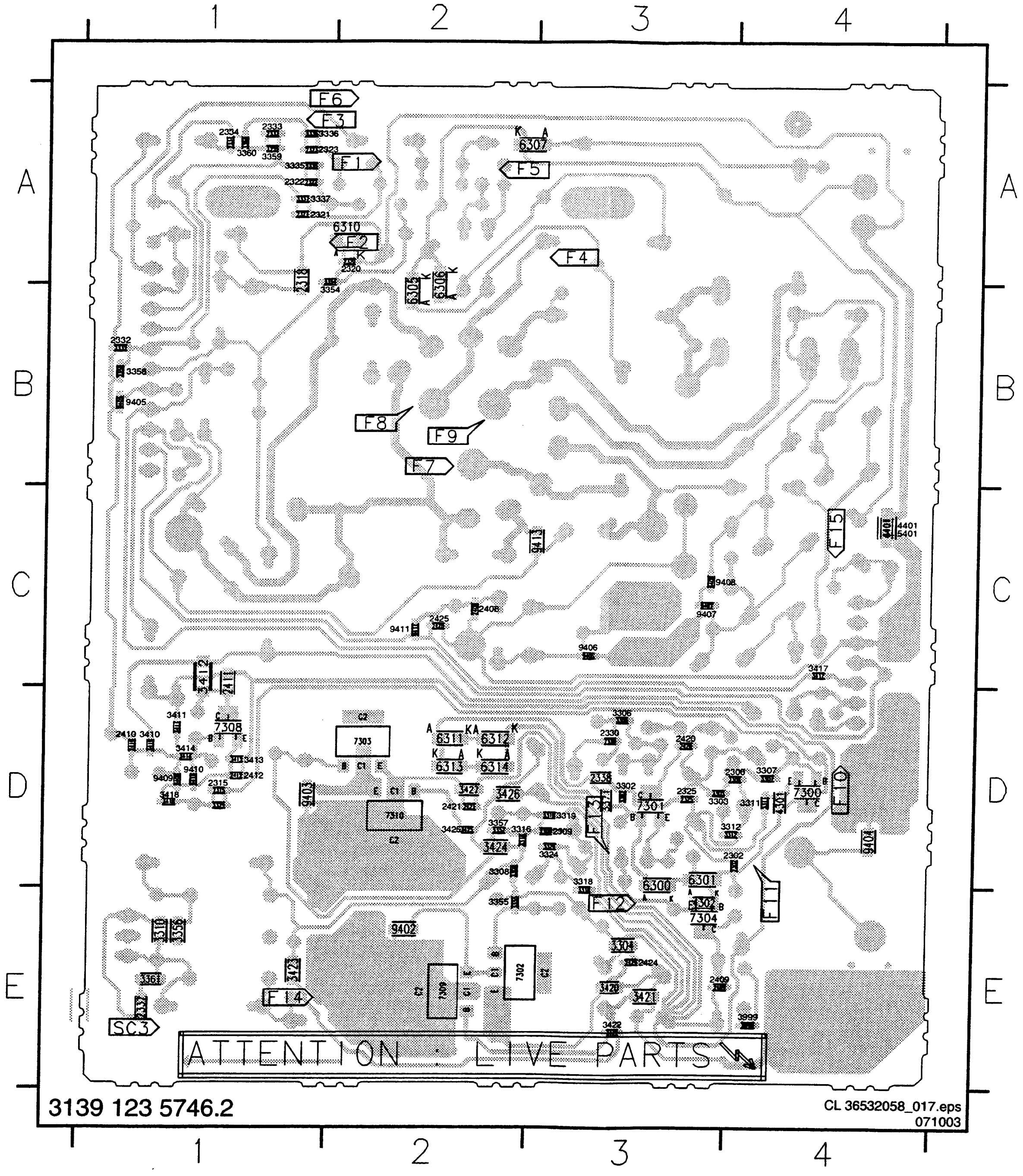

F
CRT PANEL
SCAVEM
RGB AMPLIFIER
AQUADAC
CRT
COIL
TO SCAVEM
FROM 1940
A8
TUNER and SIM CONN.
FROM 1424
A3
LINE DEFLECTION
FROM LOT
A3
FROM LOT
A3
LINE DEFLECTION
EHT
VG1
VG2
FOCUSA
FOCUSB
Blue
Green
Red
TDA6108JF
BFS20
BF824
BCP53
BCP56
MCL4148
BAS316
BAS321
BYV29X-500
S13974
+8V
200V
GND_RGB
GND_LS1
GND_SSB
N.C.
HFB_X-RAY-PROT
EHT-INFO
Y-SCAVEM In
R-CRT
G-CRT
B-CRT
CUT OFF
Filament Pulses
X-RAY-PROT_HFB
PCB-TAB4.8x0.5
Measured across 6, 10, 5300
1 2 3 4 5 6 7 8 9 10 11 12 13 14
A B C D E F G H
3139 123 5746.2
CL 36532058_015.eps 211103

Layout CRT Panel (Top Side)



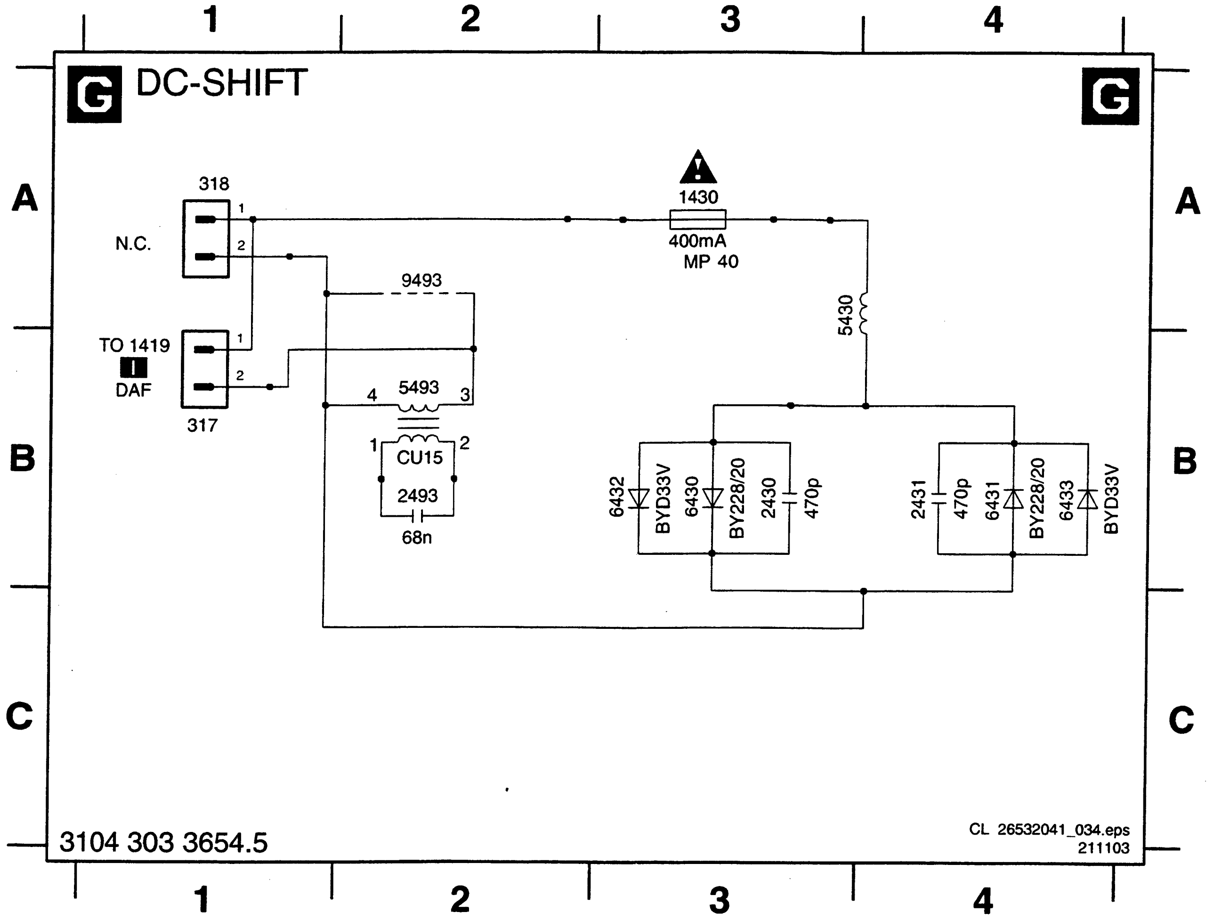
0031	A4
1237	B2
1298	B3
1424	C1
1434	B2
1435	C4
1483	E4
1940	B4
2300	E2
2301	D2
2304	E2
2307	D3
2313	A1
2316	A4
2317	C2
2319	C4
2324	B2
2336	C2
2403	B1
2404	B1
2405	B1
2406	C2
2407	C2
2422	D3
2423	E2
3300	D1
3301	E1
3323	D2
3329	D2
3334	B4
3338	A1
3339	A2
3340	B2
3341	C1
3342	A3
3345	B4
3347	B2
3349	B4
3350	A3
3351	A3
3352	A3
3370	C4
3401	C2
3402	C3
3403	C1
3404	C2
3405	E2
3416	D2
3419	D1
5300	E4
5302	E3
5303	E3
5400	C1
6401	B1
7307	A3
9300	A4
9301	C1
9302	C1
9303	D1
9304	B4
9306	B1
9307	C4
9310	E4
9311	D4
9312	C4
9313	A4
9314	C1
9315	D2
9317	E3
9318	E4
9320	C4
9400	
9401	
9412	
9414	

Layout CRT Panel (Bottom Side)



2302	D4
2306	D4
2309	D3
2315	D1
2318	A1
2320	A2
2321	A1
2322	A1
2323	A1
2325	D3
2330	D3
2332	B1
2333	A1
2334	A1
2337	E1
2338	D3
2408	C2
2409	E3
2410	D1
2411	C1
2412	D1
2420	D3
2421	D2
2424	E3
2425	C2
3302	D3
3303	D3
3304	E3
3306	D3
3307	D4
3308	D2
3310	E1
3311	D4
3312	D4
3316	D2
3318	E3
3319	D3
3324	D3
3325	D1
3335	A1
3336	A1
3337	A1
3354	A1
3355	E2
3356	E1
3357	D2
3358	B1
3359	A1
3360	A1
3361	E1
3371	D3
3410	D1
3411	D1
3412	C1
3413	D1
3414	D1
3417	C4
3418	D1
3420	E3
3421	E3
3422	E3
3423	E1
3424	D2
3425	D2
3426	D2
3427	D2
3999	E4
4301	D4
4302	E3
4401	C4
5401	
6300	
6301	
6305	
6306	
6307	
6310	
6311	
6312	
6313	
6314	
7300	
7301	
7302	
7303	
7304	
7308	
7309	
7310	
9402	
9403	
9404	
9405	
9406	
9407	
9408	
9409	
9410	
9411	
9413	

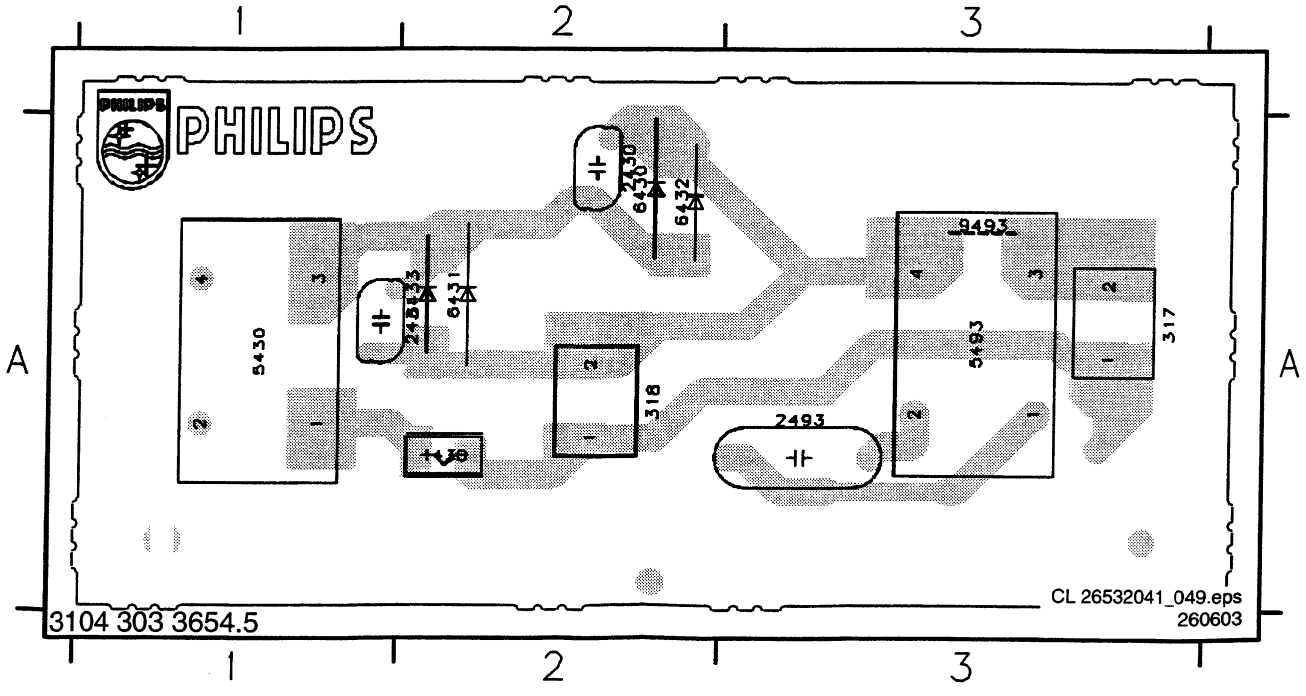
DC Shift Panel


G DC-SHIFT G
1 2 3 4
A B C
318
N.C.
TO 1419
I
DAF
317
1430
400mA
MP 40
9493
5493
CU15
2493
68n
5430
6432
BYD33V
6430
BY228/20
2430
470p
2431
470p
6431
BY228/20
6433
BYD33V
3104 303 3654.5
CL 26532041_034.eps
211103

317	B1
318	A1
1430	A3
2430	B3
2431	B4
2493	B2
5430	A3
5493	B2
6430	B3
6431	B4
6432	B3
6433	B4

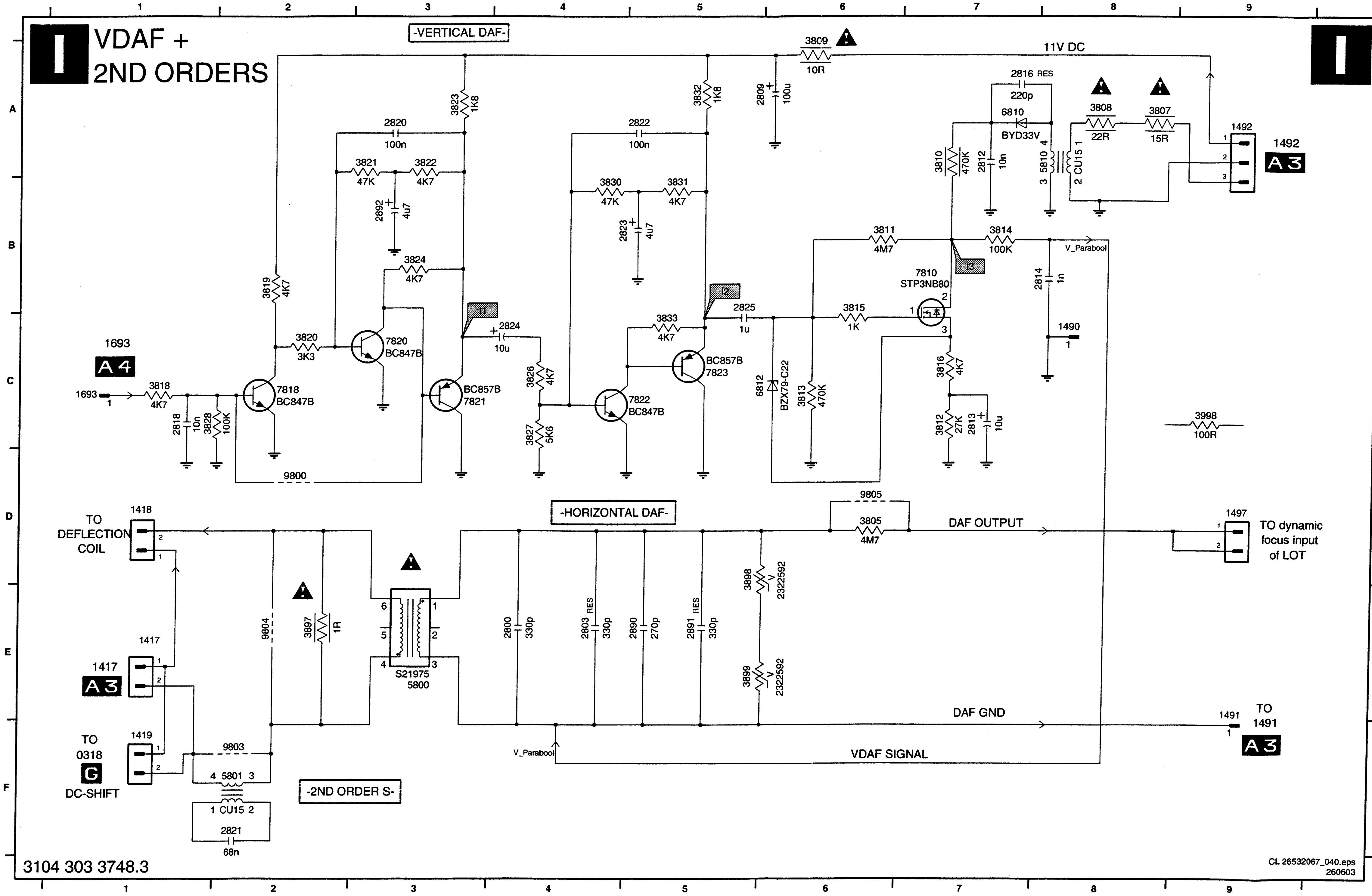
Layout DC Shift Panel

317	A3	2430	A2	5430	A1	6431	A2	9493	A3
318	A2	2431	A1	5493	A3	6432	A2		
1430	A2	2493	A3	6430	A2	6433	A2		


1 2 3
A
PHILIPS
5430
2430
6430
6432
2431
6433
6431
318
1430
2493
9493
5493
317
3104 303 3654.5
CL 26532041_049.eps
260603

Personal Notes:

VDAF Panel + 2nd Orders

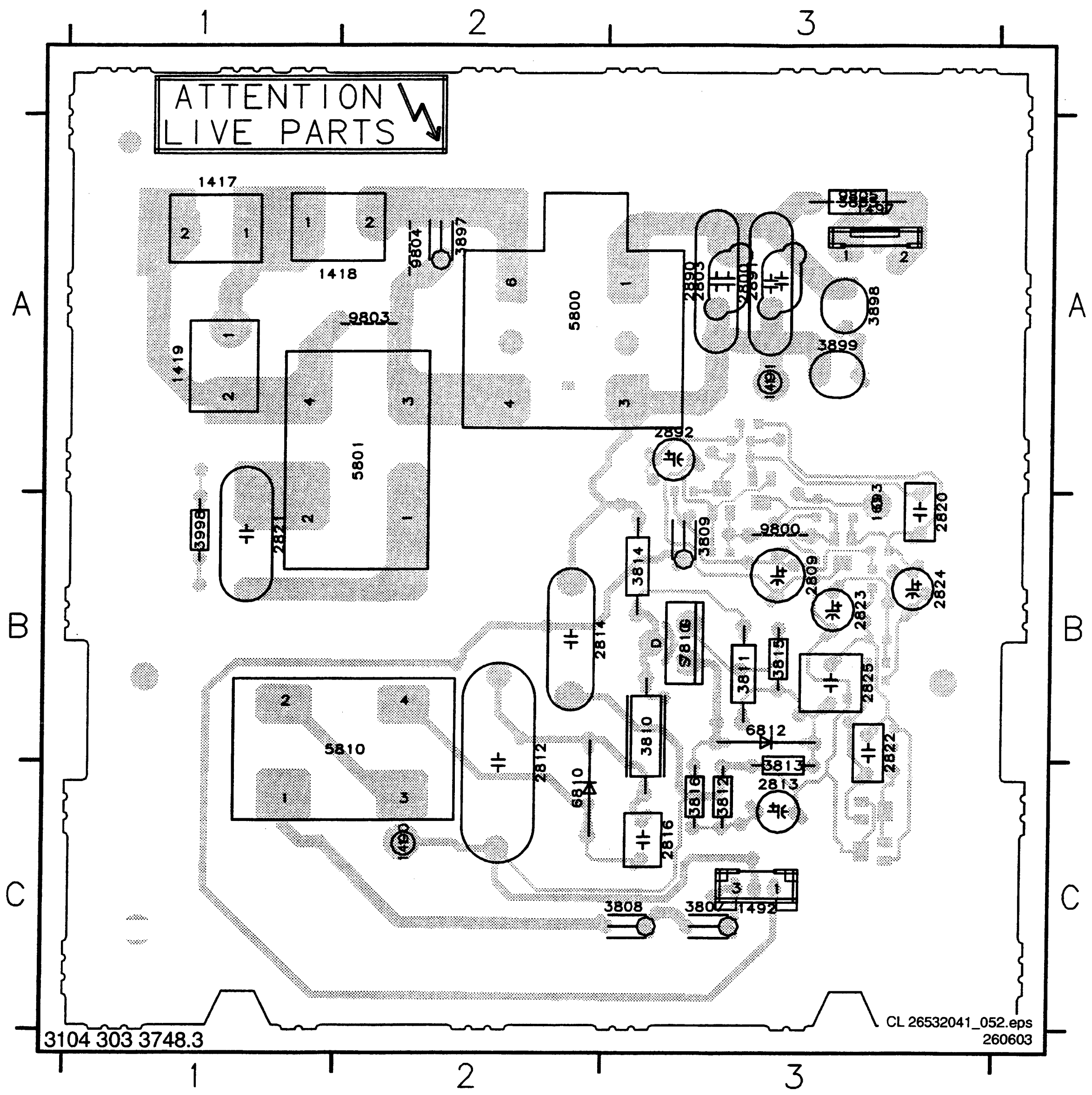

I
VDAF +
2ND ORDERS
-VERTICAL DAF-
-HORIZONTAL DAF-
-2ND ORDER S-
11V DC
3809 10R
2809 100u
3823 1K8
3832 1K8
2820 100n
2822 100n
3821 47K
3822 4K7
3830 47K
3831 4K7
2892 4u7
2823 4u7
3824 4K7
3819 4K7
3820 3K3
1693
A 4
3818 4K7
2818 10n
3828 100K
7818 BC847B
7820 BC847B
BC857B 7821
I1
2824 10u
3826 4K7
3827 5K6
7822 BC847B
BC857B 7823
I2
3833 4K7
2825 1u
6812 BZX79-C22
3813 470K
3811 4M7
3815 1K
7810 STP3NB80
I3
3814 100K
V_Parabool
3816 4K7
3812 27K
2813 10u
2814 1n
1490
3810 470K
2812 10n
2816 RES 220p
6810 BYD33V
5810 CU15
3808 22R
3807 15R
1492
A 3
3998 100R
9800
9805
3805 4M7
DAF OUTPUT
1497
TO dynamic focus input of LOT
TO DEFLECTION COIL
1418
1417
A 3
TO 0318
1419
G
DC-SHIFT
9804
3897 1R
S21975 5800
2800 330p
2803 RES 330p
2890 270p
2891 RES 330p
3898 2322592
3899 2322592
DAF GND
1491
TO 1491
A 3
VDAF SIGNAL
9803
5801
CU15
2821 68n
3104 303 3748.3
CL 26532067_040.eps 260603

Item	Location
1417	E1
1418	D1
1419	F1
1490	C8
1491	E9
1492	A9
1497	D9
1693	C1
2800	E4
2803	E4
2809	A5
2812	A7
2813	C7
2814	B8
2816	A7
2818	C1
2820	A3
2821	F2
2822	A5
2823	B4
2824	C4
2825	B5
2890	E5
2891	E5
2892	B3
3805	D6
3807	A8
3808	A8
3809	A6
3810	A7
3811	B6
3812	C7
3813	C6
3814	B7
3815	B6
3816	C7
3818	C1
3819	B2
3820	C2
3821	A3
3822	A3
3823	A3
3824	B3
3826	C4
3827	C4
3828	C1
3830	B4
3831	B5
3832	A5
3833	C5
3897	E2
3898	D5
3899	E5
3998	C9
5800	E3
5801	F2
5810	A8
6810	A7
6812	C6
7810	B7
7818	C2
7820	C3
7821	C3
7822	C5
7823	C5
9800	D2
9803	F2
9804	E2
9805	D6

[I] VDAF+2ND ORDER S

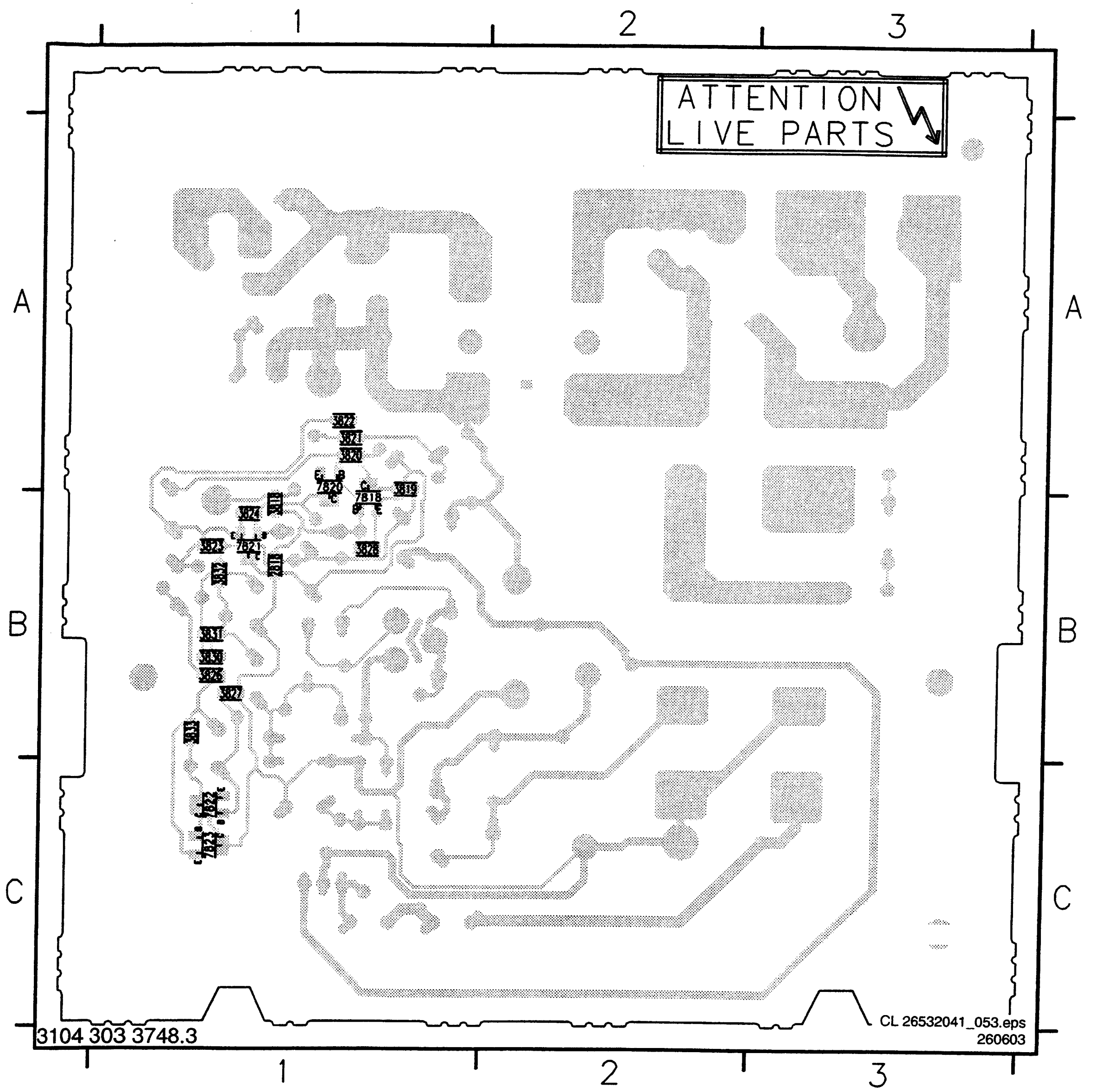
Item	29RF	28RF/32RF	34RF/38RF	36RF	Description
1492	X		X	X	3p
1693	X		X	X	1p
2800	X				330pF
2800		X	X		470pF
2800				X	390pF
2809	X		X	X	100□F
2812	X		X	X	10nF
2813	X		X	X	10□F
2814	X		X	X	1nF
2821	X	X			68nF
2822	X		X	X	4nF
2824	X		X	X	10□F
2825	X		X	X	1□F
2890	X				270pF
2890		X			220pF
2890			X		470pF
2890				X	390pF
3807	X		X	X	15R
3808	X		X	X	15R
3809	X		X	X	10R
3810	X		X	X	470kR
3811	X		X	X	4.7MR
3812	X		X	X	27kR
3813	X		X	X	470kR
3814	X		X	X	100kR
3815	X		X	X	1kR
3816	X		X		4.7kR
3816				X	2.2kR
3818	X		X	X	33kR
3820	X		X	X	Jumper
3821	X		X	X	Jumper
3822	X		X	X	Jumper
3823	X		X	X	1.5kR
3824	X		X	X	33kR
3826	X		X	X	3.3kR
3827	X		X	X	5.6kR
3828	X		X	X	100kR
3830	X		X	X	47kR
3831	X		X	X	4.7kR
3832	X		X	X	1.8kR
3833	X		X	X	4.7kR
5801	X	X			Transformer
5810	X		X	X	Bridge coil
6810	X		X	X	BYD33V
6812	X		X	X	BZX79-C22
7810	X		X	X	STP3NB80FP
7818	X		X	X	BC847B
7822	X		X	X	BC847B
7823	X		X	X	BC857B
9800	X		X	X	Wire
9803			X	X	Wire

Layout VDAF + 2ND Order Panel (Top Side)


1
2
3
A
B
C
ATTENTION
LIVE PARTS
1417
1418
1419
5800
5801
5810
9803
9804
3897
9805
1497
2890
2803
2800
2891
3898
3899
1491
2892
2821
3998
1693
2820
3809
9800
3814
2809
2823
2824
2814
7810
3811
3815
2825
6812
3810
2812
6810
3813
2822
2816
3816
3812
2813
1490
3808
3807
1492
3104 303 3748.3
CL 26532041_052.eps
260603

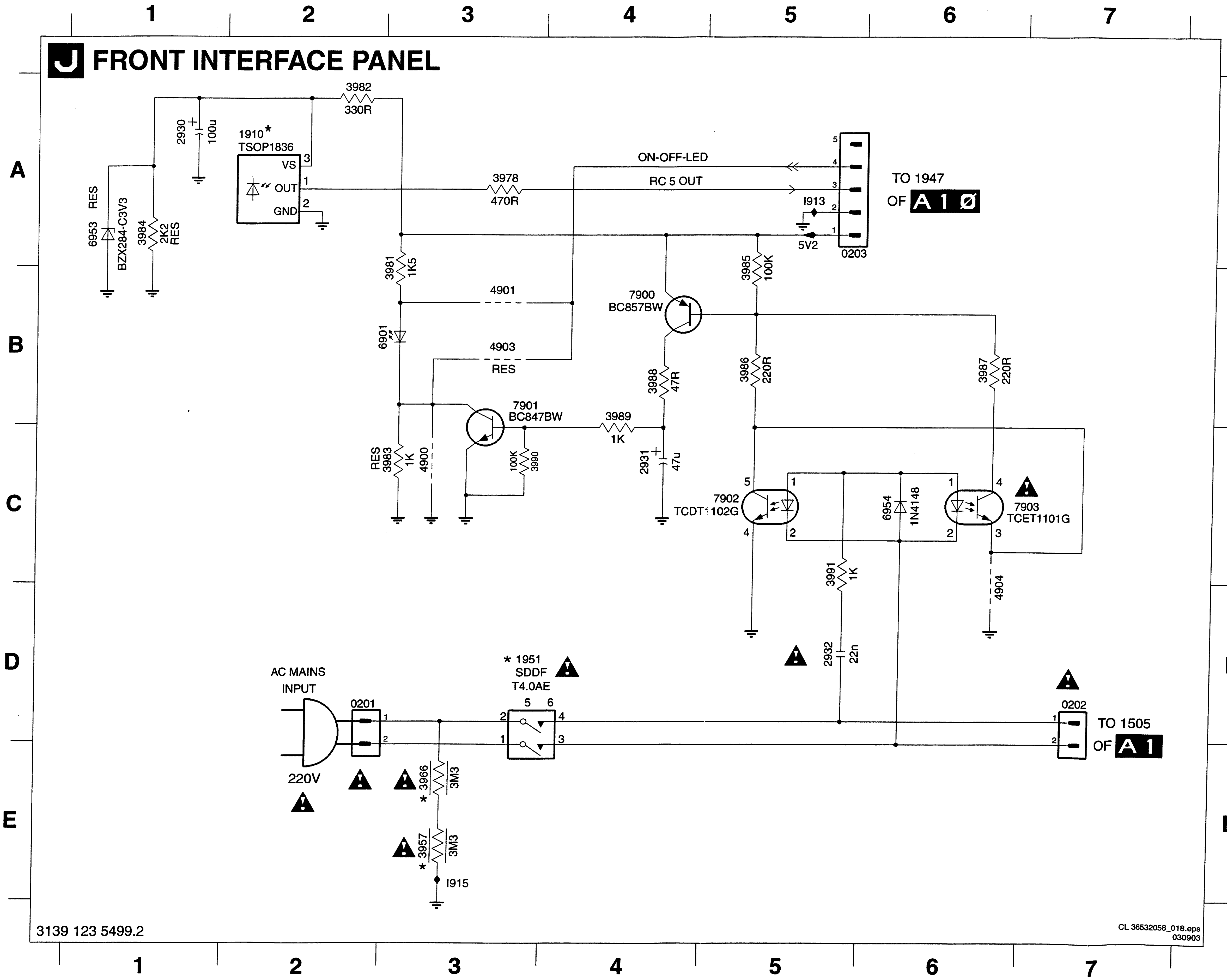
1417	A1
1418	A1
1419	A1
1490	C2
1491	A3
1492	C3
1497	A3
1693	B3
2800	A3
2803	A3
2809	B3
2812	C2
2813	C3
2814	B2
2816	C3
2820	B3
2821	B1
2822	B3
2823	B3
2824	B3
2825	B3
2890	A3
2891	A3
2892	A3
3805	A3
3807	C3
3808	C3
3809	B3
3810	B3
3811	B3
3812	C3
3813	C3
3814	B3
3815	B3
3816	C3
3897	A2
3898	A3
3899	A3
3998	B1
5800	A2
5801	A1
5810	B2
6810	C2
6812	B3
7810	B3
9800	B3
9803	A2
9804	A2
9805	A3

Layout VDAF + 2ND Order Panel (Bottom Side)


1
2
3
A
B
C
ATTENTION
LIVE PARTS
3822
3821
3820
7820
7818
3819
3824
3818
3823
7821
2818
3828
3832
3831
3830
3826
3827
3833
7822
7823
3104 303 3748.3
CL 26532041_053.eps
260603

2818	B1
3818	B1
3819	A1
3820	A1
3821	A1
3822	A1
3823	B1
3824	B1
3826	B1
3827	B1
3828	B1
3830	B1
3831	B1
3832	B1
3833	B1
7818	B1
7820	A1
7821	B1
7822	C1
7823	C1

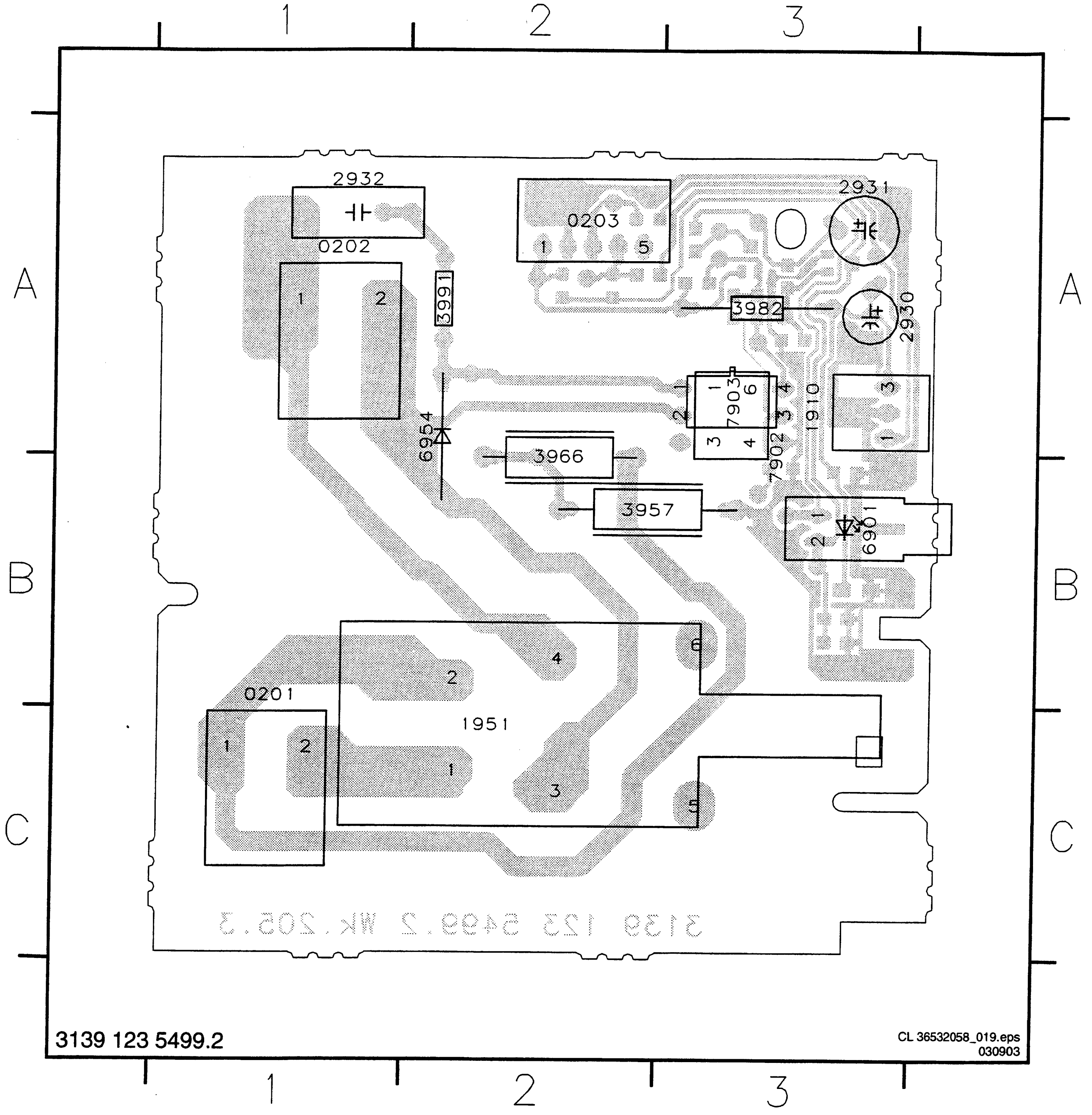
Front Interface Panel


J FRONT INTERFACE PANEL
1 2 3 4 5 6 7
A B C D E
3982
330R
2930
100u
1910*
TSOP1836
VS
OUT
GND
3
1
2
RES
6953
BZX284-C3V3
3984
2K2
RES
ON-OFF-LED
RC 5 OUT
3978
470R
5
4
3
2
1
I913
5V2
0203
TO 1947
OF A 1 Ø
3981
1K5
4901
4903
RES
6901
7900
BC857BW
3985
100K
3986
220R
3987
220R
3988
47R
7901
BC847BW
3989
1K
RES
3983
1K
4900
100K
3990
2931
47u
7902
TCDT1102G
6954
1N4148
7903
TCET1101G
3991
1K
4904
2932
22n
AC MAINS
INPUT
0201
220V
* 1951
SDDF
T4.0AE
3966
3M3
3957
3M3
I915
0202
TO 1505
OF A 1
3139 123 5499.2
CL 36532058_018.eps
030903

0201	D2
0202	D7
0203	A5
1910	A2
1951	D3
2930	A1
2931	C4
2932	D5
3957	E3
3966	E3
3978	A3
3981	B3
3982	A2
3983	C3
3984	A1
3985	B5
3986	B5
3987	B6
3988	B4
3989	B4
3990	C3
3991	C5
4900	C3
4901	B3
4903	B3
4904	D6
6901	B3
6953	A1
6954	C6
7900	B4
7901	B3
7902	C5
7903	C6

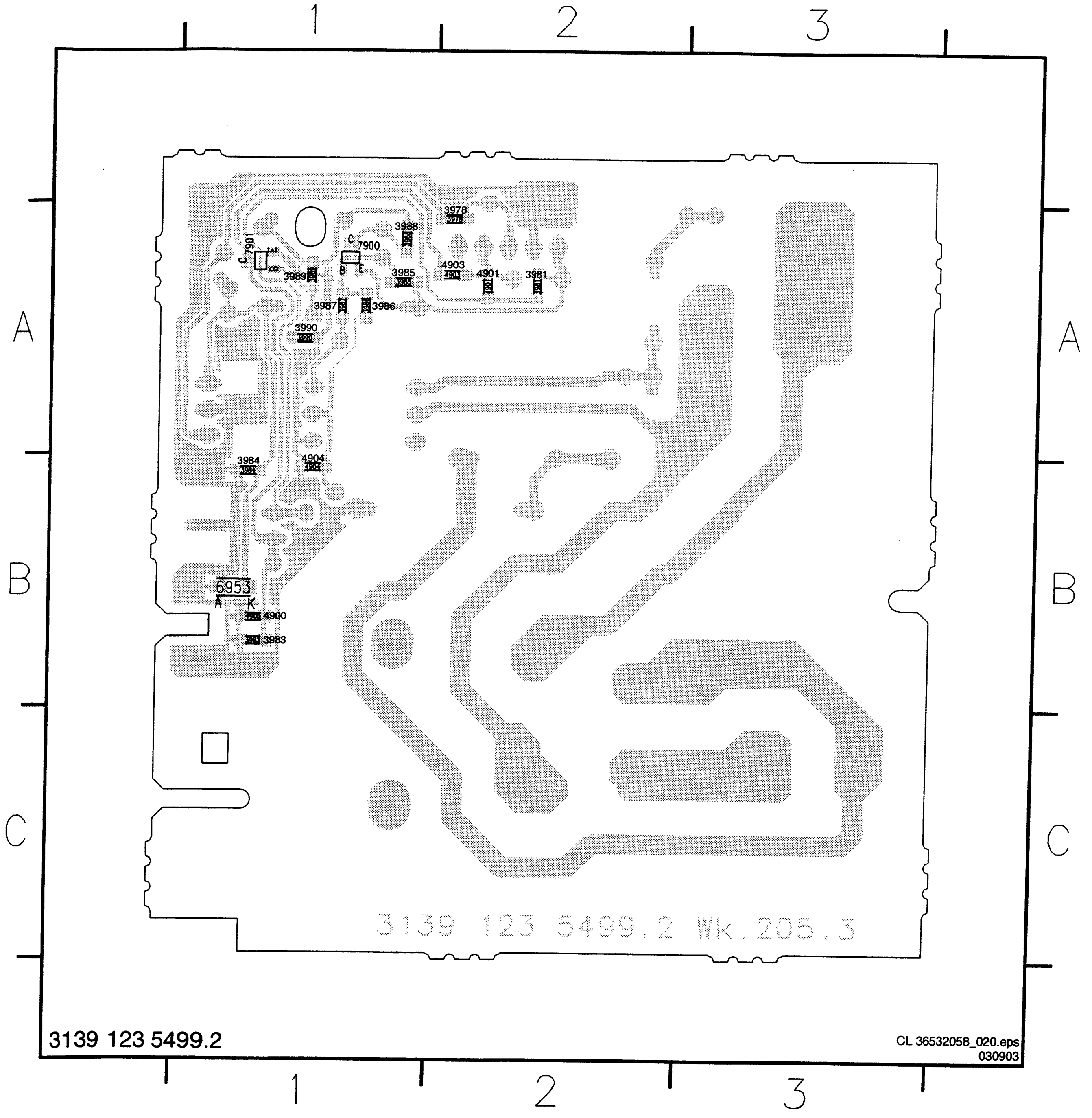
Layout Front Interface Panel (Top Side)

0201	B1
0202	A1
0203	A2
1910	A3
1951	C2
2930	A3
2931	A3
2932	A1
3957	B2
3966	B2
3982	A3
3991	A2
6901	B3
6954	A2
7902	B3
7903	A3


1
2
3
A
B
C
2932
0202
0203
1
5
2931
3991
3982
2930
7903
1910
6954
3966
7902
3957
6901
0201
1951
2
4
6
1
3
5
3139 123 5499.2
CL 36532058_019.eps
030903

Layout Front Interface Panel (Bottom Side)

3978	A2
3981	A2
3983	B1
3984	B1
3985	A1
3986	A1
3987	A1
3988	A1
3989	A1
3990	A1
4900	B1
4901	A2
4903	A2
4904	B1
6953	B1
7900	A1
7901	A1


1
2
3
A
B
C
7901
7900
3988
3978
3989
3985
4903
4901
3981
3987
3986
3990
3984
4904
6953
A
K
4900
3983
3139 123 5499.2 Wk.205.3
3139 123 5499.2
CL 36532058_020.eps
030903

8. Electrical Alignments

Index of this chapter:
1. General alignment conditions
2. Hardware alignments
3. Software alignments
4. Option settings

8.1 General Alignment Conditions

8.1.1 Default Alignment Settings

Perform all electrical adjustments under the following conditions:
- Power supply voltage: 230 V_ac / 50 Hz (± 10 %).
- Connect the set to the mains via an isolation transformer with low internal resistance.
- Allow the set to warm up for approximately 20 to 30 minutes.
- Measure voltages and waveforms in relation to chassis ground (with the exception of the voltages on the primary side of the power supply).
  Caution: never use heatsinks as ground.
- Test probe: Ri > 10 Mohm, Ci < 20 pF.
- Use an isolated trimmer/screwdriver to perform alignments.

Perform all electrical adjustments with the following default settings (for all CRTs):
- Choose "Natural" picture mode with the "Smart Picture" button on the remote control.
- Set "Dynamic Contrast" and "Active Control" to "off" (if either one of them is present).
- Set "Brightness" to aligned value unless otherwise specified.

8.1.2 Adjustment Sequence

Use the following adjustment sequence:
1. Set the correct TV-set OPTIONS as described in paragraph "Options". After storing, re-start the set.
2. Rough adjustment of VG2 and FOCUS.
3. RF-AGC alignment.
4. IF-PLL OFFSET adjustment.
5. Rough adjustment of GEOMETRY.
6. Allow the set to warm up.
7. Precise adjustment of VG2 and FOCUS.
8. Precise adjustment of GEOMETRY.
9. PIP alignments (if present).
10. COLOUR alignments.
11. Other software alignments.

8.2 Hardware Alignments

Notes:
- The Service Alignment Mode (SAM) is described in chapter 5 "Service Modes, Error Codes, and Fault Finding".
- Use the cursor-, menu-, and OK-buttons of the remote control (RC) transmitter for navigation.

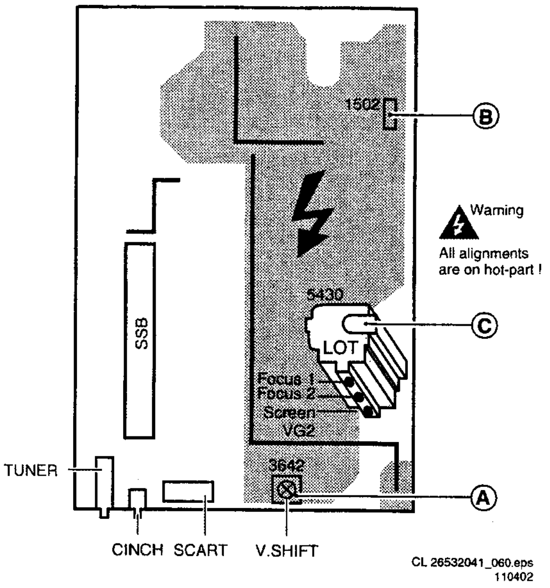


Figure 8-1 Top view LSP

8.2.1 Vg2 Adjustment

Notes:
- For adjusting the VG2 in A10 sets, the vertical scan could be disabled by the VSD bit (Vertical Scan Disable). However, do **not** use this option in this chassis, as it will lead to a "beam current" protection!
- Also, the option "VG2" in the SAM does not function yet. Please, do **not** use!

In the frame-blanking period of the R, G, and B signals applied to the CRT, the video processor inserts a measuring pulse with different DC levels. Measure the black level pulse during the vertical flyback at the RGB cathodes of the CRT.
1. Connect the RF output of a pattern generator to the antenna input. Input a "black" picture (blank screen on CRT without any OSD info) test pattern.
2. Use the MENU key to enter the "user" menu, select "Picture", and set "Brightness" and "Contrast" to minimum.
3. Set the oscilloscope to 20 V/div and the time base to 20 us/div. Use external triggering on the vertical pulse.
   Caution: use a trigger point on the "**cold**" side!
4. Ground the scope on the CRT panel ("**cold**" side) and connect a 10:1 probe to one of the cathodes of the picture tube socket (see circuit diagram F).
5. Measure at test points F017, F018 and F019 on the picture tube socket the DC-level of the measuring pulse (1st full line after the frame blanking) with respect to earth.
6. Select the pin with the highest level found and adjust V_cutoff by means of the Vg2-potmeter (lowest-one) on the Line Output Transformer (LOT) to 165 +/- 5 V_dc (for all screen sizes).
7. Reset "Contrast" and "Brightness" to their original values.

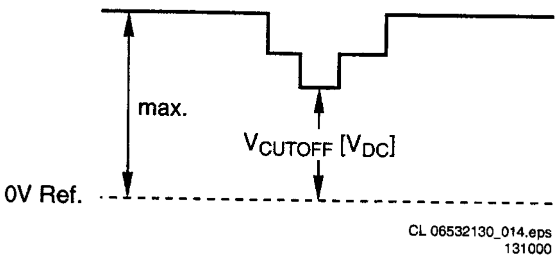


Figure 8-2 Waveform Vg2 alignment

8.2.2 Focus alignment

The LOT has the following outline:
- Focus 1 (F1) = Static alignment (black wire).
- Focus 2 (F2) = Dynamic alignment (red wire).

1. Use an external video pattern generator to input a "circle" or "crosshatch" test pattern to the set.
2. Choose "Natural" picture mode with the "Smart Picture" button on the remote control transmitter.
3. Adjust the "dynamic focus 2" potentiometer (in the middle on the LOT) until the horizontal lines at the centre of the screen are of minimum width without introducing a visible haze.
4. Adjust the "static focus 1" potentiometer (highest of the LOT) until the horizontal lines at the sides of the screen are of minimum width without introducing a visible haze.
5. Repeat these two steps to achieve the best result.

8.3 Software Alignments

Put the set in the SAM (see the "Service Modes, Error Codes and Fault Finding" section). The SAM menu will now appear on the screen. The different alignment parameters are described further on.

Notes:
- All changes to menu items and alignments must be stored manually.
- If an empty EAROM (permanent memory) is detected, all settings are set to pre-programmed default values, so the set must be re-aligned.

8.3.1 TUNER

AGC
1. Set an external pattern generator to a colour bar video signal and connect the RF output to the aerial input of the TV. Set the amplitude to 10 mV and the frequency to 475.25 MHz. Use system PAL B/G if possible, otherwise match the system of your generator with the received signal in the set.
2. Put the set in the SAM mode.
3. Select via the TUNER menu, the AGC sub-menu.
4. Connect a DC multi-meter to pin 1 of the tuner (item 1200 on the LSP).
5. Adjust the AGC until the voltage at pin 1 of the tuner is 3.3 V (+/- 0.1 V). The value can be incremented or decremented by pressing the right/left CURSOR button on the RC.
6. After alignment, save the value(s) with the STORE command in the SAM main menu.

IF PLL OFFSET
No adjustments needed: default value is "35".

If the mentioned default value does not give the required result, use the following alignment method:

1. Set an external pattern generator to a crosshatch video signal and connect the RF output to the aerial input of the TV. Set the amplitude to 10 mV and the frequency to 475.25 MHz. Use system PAL B/G if possible, otherwise match the system of your generator with the received signal in the set.
   - For "Negative modulation", the **sound** signal must be a non-modulated FM signal.
   - For "Positive modulation", the **video** signal must have high modulation (100% or above).
2. Put the set in the SAM mode.
3. Select via the TUNER menu, the IF-PLL OFFSET sub-menu.
4. Measure and align:
   - For "Negative modulation", on SCART pin 1 or 3 (**audio** out): Adjust IF-PLL OFFSET until the largest Signal Noise Ratio (SNR) is reached.
   - For "Positive modulation", on SCART pin 19 (**video** out): Adjust IF-PLL OFFSET until you get minimal V-sync disturbance.

8.3.2 GEOMETRY

Notes:
- Set an **external** pattern generator to a crosshatch video signal and connect the RF output to the aerial input of the TV. Set the amplitude at least 1 mV_rms (60 dBuV) and the frequency to 475.25 MHz. Use system PAL B/G if possible, otherwise match the system of your generator with the received signal in the set.
  Note: Do **not** use the internal test pattern from the GEOMETRY menu!
- Use the default alignment settings, but set "Brightness" to "32".
- For wide screen models, set to "wide screen" mode, for "classic" models, set to "4:3".
- After alignment, save the value(s) with the STORE command in the SAM main menu.

Service tip: When the set is equipped with a rotation coil, use this menu item to check its correct alignment. If alignment is not correct, go to the user MENU, choose FEATURES, and select ROTATION. With the use of a crosshatch test pattern, align it to a correct horizontal picture.

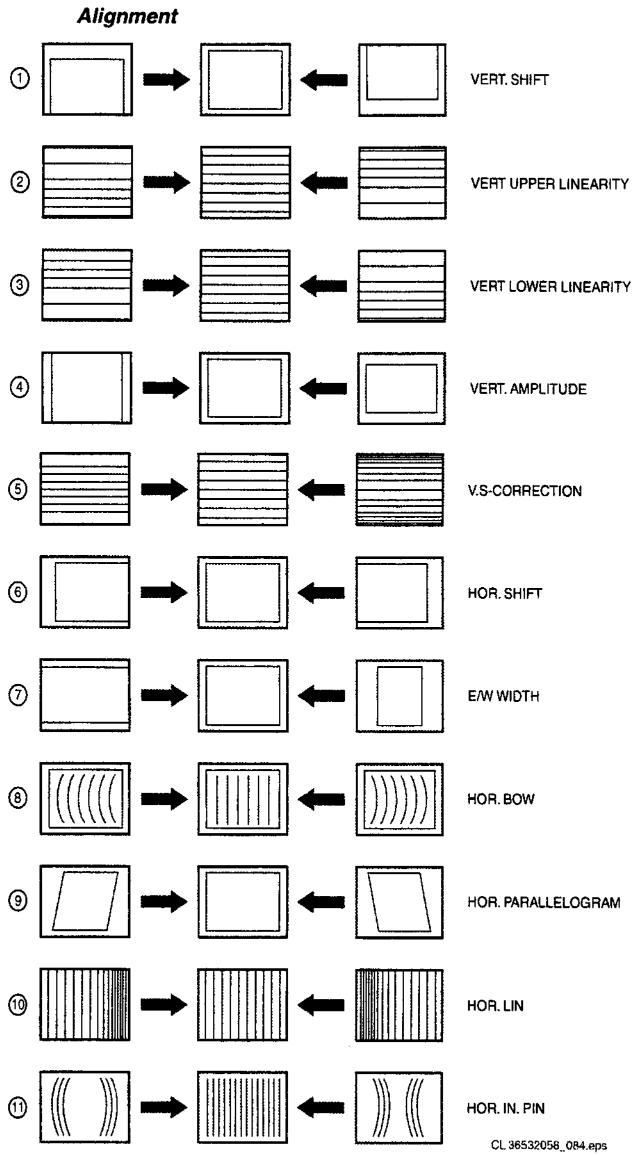


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Figure 8-3 Geometry Alignments

1. Before starting the vertical alignment, set (in SAM) the following parameters to "0":
   - VER. SHIFT,
   - VER. SCOR,
   - VER. U_LIN,
   - VER. L_LIN.
2. Set SERV. BLK to "on", to blank the lower half of the screen.
3. Adjust the "VERTICAL SHIFT" potentiometer (R3642 on the LSP) until the picture is centred (to the mechanical centre of the picture tube), and switch SERV. BLK to "off".
4. Adjust VER. U_LIN and VER. L_LIN such, that upper and lower horizontal lines of the crosshatch pattern are just visible.

Use then the following software regulations to modify the geometry:

1. VER. AMPL (Vertical Amplitude): Align for the vertical picture centre, range from -32 to +32.
2. VER. SHIFT (Vertical Shift): Compensating for any gain error in amplifier, adjust range from -32 to +32 to the proper amplitude.
3. VER. SCOR (Vertical S-Correction): Align for equal height of the blocks in the top, the bottom and the middle, range from -63 to +63.
4. HOR. SHIFT (Horizontal Shift): Adjust for the horizontal centre of the screen, range from -127 to +128.

Next step is to align the East/West geometry.

1. First, set the parameters EW_5 and EW_6 to "0"
2. EW. WIDTH (East-West Width): This sets the (overall) horizontal size of the picture on the screen. Range from -63 to +63 (with the following EW alignments, these lines can be straightened).
3. EW_1 (East-West parameter 1): Has effect on the length of the upper part of the vertical E/W lines.
4. EW_2 (East-West parameter 2): Has effect on the length of the vertical E/W lines just below EW_1.
5. EW_3 (East-West parameter 3): Has effect on the length of the vertical E/W lines just below EW_2.
6. EW_4 (East-West parameter 4): Has effect on the length of the vertical E/W lines just below EW_3.
7. EW_5 (East-West parameter 5): Has effect on the length of the vertical E/W lines just below EW_4.
8. EW_6 (East-West parameter 6): Has effect on the length of the vertical E/W lines just below EW_5.
9. EW_7 (East-West parameter 7): Has effect on the length of the vertical E/W lines just below EW_6.
10. EW_8 (East-West parameter 8): Has effect on the length of the vertical E/W lines just below EW_7.
11. EW_9 (East-West parameter 9): Has effect on the length of the vertical E/W lines just below EW_8.
12. EW_10 (East-West parameters 10): Has effect on the length of the lowest part of the vertical E/W lines.
13. HOR. BOW (Horizontal Bow): Align the EW parabola to be symmetrical, range from -63 to +63.
14. HOR. PARALLEL (Horizontal Parallel): Align for straight vertical lines on the picture sides, range from -63 to +63.
15. HOR. LIN (Horizontal Linearity): Align for equal width of horizontal blocks on the left, the right and the centre, range from 0 to +127.
16. HOR. IN_PIN (Horizontal Inner Pincushion): Align for the inner straight vertical lines, range from 0 to +32.

8.3.3 WHITE TONE

In the WHITE TONE sub menu, the colour values for the different colour temperatures can be changed.
The colour temperature mode (NORMAL, DELTA COOL, DELTA WARM) can be selected per colour (R, G, and B) with the RIGHT/LEFT cursor keys. The mode or value can be changed with the UP/DOWN cursor keys.
First, the values for the NORMAL colour temperature must be selected. Then the offset values for the DELTA COOL and DELTA WARM mode can be selected. Note that the alignment values are non-linear.

Alignment

No adjustments needed. Use the given default values:

Table 8-1 White tone alignment (default values)

Parameter	28PW8609/12	29PT8509/12	32PW8609/12
Normal Red	-4	+11	+1
Normal Green	-9	+4	-7
Normal Blue	-6	+12	-2
Red BL Offset	7		
Green BL Offset	7		
Blue BL Offset	7		
Delta Cool Red	7		
Delta Cool Green	15		
Delta Cool Blue	33		
Delta Warm Red	2		
Delta Warm Green	3		
Delta Warm Blue	7		

If the mentioned default value does not give the required result, use the following alignment method:

1. Set the external pattern generator to a 100% white pattern, and connect the RF output to the aerial input of the TV. Set the amplitude at least 1 mV_rms (60 dBuV) and the frequency to 475.25 MHz. Use system PAL B/G if possible, otherwise match the system of your generator with the received signal in the set.
2. Set "Smart Picture" to "Natural".
3. Set "Dynamic NR" to "off".
4. Put the set in the SAM mode.
5. Select via the WHITE TONE menu, the PATTERN sub-menu.
6. Set PATTERN to "on".
7. Set NORMAL GREEN to "32".
8. Measure with the colour analyser (Minolta CA100 Colour Analyser or equivalent), calibrated with the spectra, on the centre of the screen.
9. Adjust with the cursor left/right command the Red and Blue register for the right xy-coordinates (see the table below).
10. Repeat the white tone adjustment also for the colour temperatures COOL and WARM.

Table 8-2 White tone alignment (with colour analyser)

White D mode	Temperature	DUV	x	y
Normal	8500 K	+-0.004	288 +/- 4	300 +/- 4
Cool	11500 K	+-0.005	273 +/- 5	282 +/- 5
Warm	7000 K	+-0.005	305 +/- 5	312 +/- 5

8.3.4 SOUND

No adjustments needed. Use the given default values:

- PRESCALE LEVEL
  - FM: "+1".
  - NICAM: "+3".
  - EXTAM Gain: "0".
  - PIPMONO: "0".
  - ExtLR-in: "0".
- TRESHOLD LEVEL
  - Over Mod Tresh: "+3dB".
  - NIC ErrLmt_Hi: "60".
  - NIC ErrLmt_Lo: "20".
  - NoiseTres SC2: "+2".
  - NoiseHyst SC2: "+4".
- EFFECTS LEVEL
  - BMT CutOffFrq: "50Hz".
  - Incredible SND: "60%".
  - VDolby: "100%".

8.3.5 SMART SETTINGS

No adjustments needed. Use the given default values:

Table 8-3 Smart settings (default values)

Smart setting		Default
RICH	BGT	55
	COL	55
	CON	100
	SHP	6
	HUE	51
NATURE	BGT	51
	COL	48
	CON	80
	SHP	5
	HUE	51
SOFT	BGT	49
	COL	45
	CON	65
	SHP	4
	HUE	51
MULTI	BGT	51
	COL	48
	CON	85
	SHP	6
	HUE	51
BGT= Brightness, COL= Colour, CON= Contrast, SHP= Sharpness, HUE= Hue (not valid for Europe).		

8.4 Option Settings

8.4.1 Introduction

The microprocessor communicates with a large number of I2C ICs in the set. To ensure good communication and to make digital diagnosis possible, the microprocessor has to know which ICs to address. The presence / absence of these specific ICs (or functions) is made known by the option codes.

Notes:

- After changing the option(s), save them with the STORE command.
- All changes are disregarded when the OPTIONS submenu is left without using the STORE command.
- The new option setting is only active after the TV is switched "off" and "on" again with the Mains switch (the EAROM is then read again).

8.4.2 Changing options

Options are used to control the presence / absence of certain features and hardware. There are two ways to change the option settings. All changes in the option settings are saved by selecting STORE and pressing the CURSOR RIGHT key. Some changes will only take affect after the set has been switched OFF and ON with the mains switch (cold start).

Changing multiple options by changing option byte values

Option Bytes (OB) makes it possible to set all options very fast. An option byte represents a number of different options. All options are controlled via eight option bytes (OB0 to OB7). Select an Option Byte you want to change with the CURSOR UP/DOWN keys, and key in the new value. See table for more details. An explanation per option is listed in paragraph "Option Bit Definition".

Changing a single option

It is also possible to change an option one at a time. Therefore, select the option with the CURSOR UP/DOWN keys and change its setting with the LEFT/RIGHT keys.

8.4.3 Option Settings

In the table, you will find the option settings.

Table 8-4 Option bit overview

Byte number	Bit number	Decimal value	Name	28PW8609/12	29PT8509/12	32PW8609/12
OB1	1	2	SCAVM	1	1	1
	5	32	RCMX	0	0	0
	6	64	EQTO	0	0	0
	8	256	WSSB	1	0	1
	12	4096	DGSC	1	1	1
	14	16384	SSHT	1	0	1
OB2	5	32	DBYV	1	1	1
	9	512	P50	0	0	0
	11	2048	QPEAK	0	0	0
	12	4096	EPG	0	0	0
OB3	0	1	AV3	1	1	1
	1	2	SCT3	0	0	0
	5	32	SOSD	0	0	0
	8	256	ASPR	1	0	1
	9	512	ROTI	1	0	1
OB4	3	8	PITN *	0	0	0
	4	16	PITN *	0	0	0
OB5	6	64	AAVL	1	1	1
OB8	4	16	PIPC	0	0	0
	5	32	PIPT	0	0	0
OB9	0	1	APC	1	1	1
	5	32	VMOD	0	0	0
	7	128	TIME	1	1	1
	8	256	DNR	1	1	1
	9	512	BBD	0	0	0
	10	1024	ASF	0	0	0
OB10	5	32	UKPNP	0	0	0
	6	64	DTXT	1	0	1
	8	256	SBNP	1	1	1
	9	512	AUSB	0	0	0
	10	1024	CZOM	1	0	1
	11	2048	HSHT	1	0	1
	14	16384	CHLK	1	1	1
OB11	9	512	T1H0	1	1	1
	13	8192	FAPG	1	1	1
	14	16384	ACI	1	1	1
OB12	8	256	PLST	1	1	1
OB13	0	1	T2H5	1	1	1
	2	4	T12H	1	1	1
	3	8	EWEU	0	0	0
	7	128	SMCK	1	1	1
	8	256	ATS	1	1	1

* = There are 2 bits for this option:
00 = Philips,
01 = Other

Unused options have a default value of "0"

8.4.4 Option Bit Definition

Sources

AV3: Side AV source.
Function: Disable/Enable side AV source.
Values: OFF= Disabled, side AV source is not available. ON= Enabled, side AV source is available.

SCT3: SCART 3 input.
Function: Disable/Enable Scart3 input.
Values: OFF= Disabled. ON= Enabled.

Video

ASPR: Aspect Ratio Setting.
Function: Select between 4 by 3 or 16 by 9 set.
Values: OFF= 4 by 3 set. ON= 16 by 9 set.

DNR: Dynamic Noise Reduction.
Function: Disable/Enable (Dynamic) Noise Reduction function.
Values: OFF=Disabled. ON= Enabled.

BBD: Black Bar Detection.
Function: Disable/Enable Black Bar Detection.
Values: OFF=Disabled, Black Bar Detection not available. ON= Enabled, Black Bar Detection available.
Note: The Auto Screen Fit will not be included in the picture size loop when BBD is OFF.

ASF: Auto Screen Fit.
Function: Disable/Enable Auto Screen Fit.
Values: OFF=Disabled, Auto Screen Fit is not available. ON= Enabled, Auto Screen is Fit available.

CZOM: Continuous Zoom.
Function: Disable/Enable Continuous Zoom.
Values: OFF=Disabled. ON= Enabled.

HSHT: Heading Shift.
Function: Disable/Enable Heading Shift.
Values: OFF=Disabled. ON= Enabled.

SSHT: Subtitle Shift.
Function: Disable/Enable Subtitle Shift.
Values: OFF=Disabled. ON= Enabled.

APC: Auto Picture Control (Auto TV).
Function: Disable/Enable Auto picture control.
Values: OFF= Disabled. ON= Enabled.

WSSB: Wide Screen Signalling Bit.
Function: Disable/Enable Wide screen Signalling bit function.
Values: OFF= Disabled. ON= Enabled.

ROTI: Rotation Tilt.
Function: Change the tilt level of picture tube.
Values: OFF= Disabled, menu item ROTATION is not available. ON= Enabled, menu item ROTATION is available.

DGSC: Digital Scan.
Function: Enable/Disable the Digital Scan in the DIGITAL OPT menu.
Values: OFF= Disabled, menu item DIG SCAN is not available. ON= Enabled, menu item DIG SCAN is available.

SCAVM: SCAVEM.
Function: Enable/Disable SCAVEM.
Values: OFF= Disabled. ON= Enabled.

Audio

AAVL: Automatic Volume Level control.
Function: Disable/Enable automatic volume leveller function.
Values: OFF=Disabled, menu item AVL is not available. ON= Enabled, menu item AVL is available.

DBYV: Dolby Virtual.
Function: Select surround setting.
Values: OFF= Disabled, DOLBY VIRTUAL setting is not available. ON= Enabled, DOLBY VIRTUAL setting is available.
Note: Incredible surround & Dolby virtual are mutually exclusive.

EQTO: Equalizer or Tone control.
Function: Selection between Equalizer and Tone control (Bass and Treble).
Values: OFF= Tone control (Bass and Treble). ON= Equalizer.
Note: Equalizer and Tone (Bass and treble) control are mutually exclusive.

QPEAK: AV Sound Mode detection.
Function: The current Sound Mode detection in AV is not working correctly. The optimal threshold value for the correct sound mode detection is still being investigated. Therefore, this is needed to disable the Sound Mode detection in AV until the correct threshold is identified.
Value: OFF= Disabled, AV sound auto detection is not available. ON= Enabled. AV sound auto detection is available.

Tuning
PITN: Philips Tuner.
Function: Choose the tuner type that is configured in the hardware.
Values: OFF= Disabled, ALPS compatible tuner is used. ON= Enabled, Philips compatible tuner is used.

Installation
ACI: Automatic Channel Installation.
Function: Disable/Enable automatic channel installation.
Values: OFF= Disabled Automatic Channel Installation. ON= Enabled Automatic Channel Installation.
Note: Download present program when ACI is ON.

ATS: Automatic Tuning System.
Function: Disable/Enable automatic tuning system.
Values: OFF= Disabled, automatic tuning system is ignored. ON= Enabled Automatic Tuning System, sort the program in an ascending order starting from Program 1.
Note: Sort the program in an ascending order starting from Program 1 when ATS is ON.

VMOD: Virgin Mode.
Function: Disable/Enable virgin mode.
Values: OFF= Disabled, cannot access virgin mode. ON= Enabled, can access virgin mode.
Note: Plug and Play menu item will be displayed to perform installation at the initial start up of the TV when MOD is ON and after installation is done, VMOD will be automatically set to OFF.

UKPNP: UK Plug and Play.
Function: Disable/Enable UK's default Plug and Play setting.
Values: OFF= Disabled, UK's default Plug and Play setting is not available. ON= Enabled, UK's default Plug and Play setting is available.
Note: When UKPNP and VMOD are ON at the initial set-up, LANGUAGE= ENGLISH, COUNTRY= GREAT BRITAIN and after auto store is complete, VMOD will be set automatically to OFF while UKPNP remain ON.

Program Selection
PLST: Program List.
Function: Disable/Enable Program List function.
Values: OFF= Disabled, the access to Program List Command is ignored. ON= Enabled, the access to Program List Command is processed.

Picture In Picture
PIPC: PIP Control.
Function: Disable/Enable submenu to adjust PIP Picture settings
Values: OFF= Disabled, PIP feature is not available. ON= Enabled, PIP feature is available
Note: PIP is present in FEATURES submenu when PIPC is ON. When PIPC is switched OFF, bits PIPT, W4X3, and W169 must be automatically set to OFF.

PIPT: PIP Tuner.
Function: To determine the presence of second tuner.
Values: OFF= Disabled, second tuner is not available. ON= Enabled, second tuner is available.
Note: When PIPC is switched OFF, bits PIPT, W4X3, and W169 must be automatically set to OFF.

Clock
SMCK: Smart Clock/Autochron.
Function: Disable/Enable smart clock/AutoChron function.
Values: OFF= Disabled, menu item smart clock function not available. ON= Enabled, menu item smart clock function available.
Note: For NAFTA, AUTOCHRON is present in INSTALL submenu when SMCK is ON. For AP-PAL and EUROPE, Smart clock downloaded from Teletext is enabled when SMCK is ON.

TIME: Timer.
Function: Disable/Enable menu item TIMER.
Values: OFF= Disabled, menu item TIMER not available. ON= Enabled, menu item TIMER available.
Note: TIMER submenu is present in FEATURES submenu when TIME is ON.

Data Service
DTXT: Dual Text.
Function: Disable/Enable Dual Text.
Values: OFF= Disabled. Dual text is not available. ON= Enabled. Dual text is available.

RCMX: RC for Teletext Mix Mode.
Function: Disable/Enable RC for Teletext Mix mode support.
Values: OFF= Disabled. RC for mix mode is not available. ON= Enabled, RC for mix mode is available.

FAPG: Favourite Page.
Function: Disable/Enable favourite page in Teletext mode.
Values: OFF= Disabled favourite page in Teletext mode. ON= Enabled favourite page in Teletext mode.

T1H0: 100-Page Text.
Function: Disable/Enable 100-page Text.
Values: OFF= Disabled. 100-page text is not available. ON= Enabled, 100-page text is available.

T2H5: 250-Page Text.
Function: Disable/Enable 250-page Text.
Values: OFF= Disabled. 250-page text is not available. ON= Enabled, 250-page text is available.

T12H: 1200-Page Text.
Function: Disable/Enable 1200-page Text.
Values: OFF= Disabled. 1200-page text is not available. ON= Enabled, 1200-page text is available.

Lock Features
CHLK: Child Lock.
Function: Disable / Enabled function to block/unblock channels.
Values: OFF= Disabled. ON= Enabled.

OSD/Menu Related
SOSD: Smart OSD.
Function: Disable/Enable full display of SMART SOUND and SMART PICTURE OSD.

Values: OFF= Disabled, full display of SMART SOUND and SMART PICTURE OSD not available. ON= Enabled, full display of SMART SOUND and SMART PICTURE OSD available.

Miscellaneous

SBNP: Auto Standby with No Picture.
Function: Disable/Enable automatic switch to standby after 15 minutes when no ident.
Values: OFF= Disabled, no automatic switch to standby. ON= Enabled, set switches to standby after 15 minutes when no ident.

AUSB: Auto Standby Auto On.
Function: Disable/Enable automatic switch to standby if no RC or local keyboard response after 4 hours provided that the set is ON from standby mode by the timer.
Values: OFF= Disabled, no automatic switch to standby. ON= Enabled, set switches to standby after 4 hours.

EPG: Electronic Program Guide.
Function: Disable/Enable EPG feature.
Values: OFF= Disabled, EPG feature is not available. ON= Enabled, EPG feature is available.

P50: P50 (Easylink).
Function: Disable/Enable P50 feature.
Values: OFF= Disabled, P50 feature not available. ON= Enabled, P50 feature is available.

EWEU: East/West Europe region.
Function: Select between East Europe and West Europe.
Values: OFF= West Europe. ON= East Europe

9. Circuit Descriptions, Abbreviation List, and IC Data Sheets

Index of this chapter:

1. Introduction
2. Block diagrams
3. Power supply
4. Video
5. Synchronisation
6. Audio
7. Control
8. Protections
9. Software upgrading
10. Abbreviation list

- Only **new** circuits (circuits that are not published recently) are described.
- For the "known" LSP circuits, see the EM5E manual. This manual is available under number 3122 785 12560 (= English).
- Figures can deviate slightly from the actual situation, due to different set executions.
- For a good understanding of the following circuit descriptions, please use the diagrams in chapter 6 and 7. Where necessary, you will find a separate drawing for clarification.

9.1 Introduction

The A02 is intended as the Mainstream TV platform for the years 2003 and 2004 and successor to the A10. Covering three ranges (Digital Ready, Digital Prepared, and Digital Integrated) with screen sizes of 28 inch WS to 36 inch WS RF (16:9) and 29 inch to 38 inch RF (4:3). The platform supports 50 Hz, 100 Hz, and progressive scan.
It is based on the SALSA system (System Application for Lower Segment Analogue television), which is a highly integrated solution for TV. The system comprises two ICs: the ADOC (Analogue Digital One Chip) and the MPIF (Multi Platform InterFace). The MPIF IC performs analogue processing for IF, source selection, and analogue to digital conversion. The ADOC IC incorporates video and audio processing as well as the complete TV control functionality. The ADOC aims at the low and mid range market segment.

The split-up between an analogue (MPIF) and a digital part (ADOC) has the following advantages:

- High frequent parts (IF) can be included in the concept.
- Less A/D and D/A converters needed for source switching.
- Better performance for AD converters (realised in analogue design environment, more accurate, less tolerance).
- Critical items like reference voltages can be realised in the analogue environment.
- Integrated SCART buffers.

The new A02 chassis has the following features:

- An LSP (Large Signal Panel) that is based on the existing EM5 chassis.
- A new SSB (Small Signal Board) with very high integration.
- Upgradeable main software (via ComPair). The software is a large and re-engineered version of the 'MG' software used by Philips CE for several years.

9.1.1 Large Signal Panel

The chassis has a full sized LSP, which is identical to the one in the EM5 chassis.

The main functionalities of the LSP are:

- Supply,
- Deflection,
- Sound amplification.

The LSP (single sided) is built up very conventional, with hardly any surface mounted components on the copper side. It has a large "hot" part, including both deflection coils.

9.1.2 Small Signal Board

The SSB is a high tech module (four layer, 2 sides reflow technology, full SMC) with very high component density. Despite this, it is designed in such a way, that repair on component level is possible. To achieve this, attention was paid to:

- Accessibility of the test points. The SSB has good accessible service positions.
- Clearance around surface mounted ICs (for replacing).
- Detailed diagnostics and fault finding is possible via ComPair.
- Software upgrading is possible via ComPair.

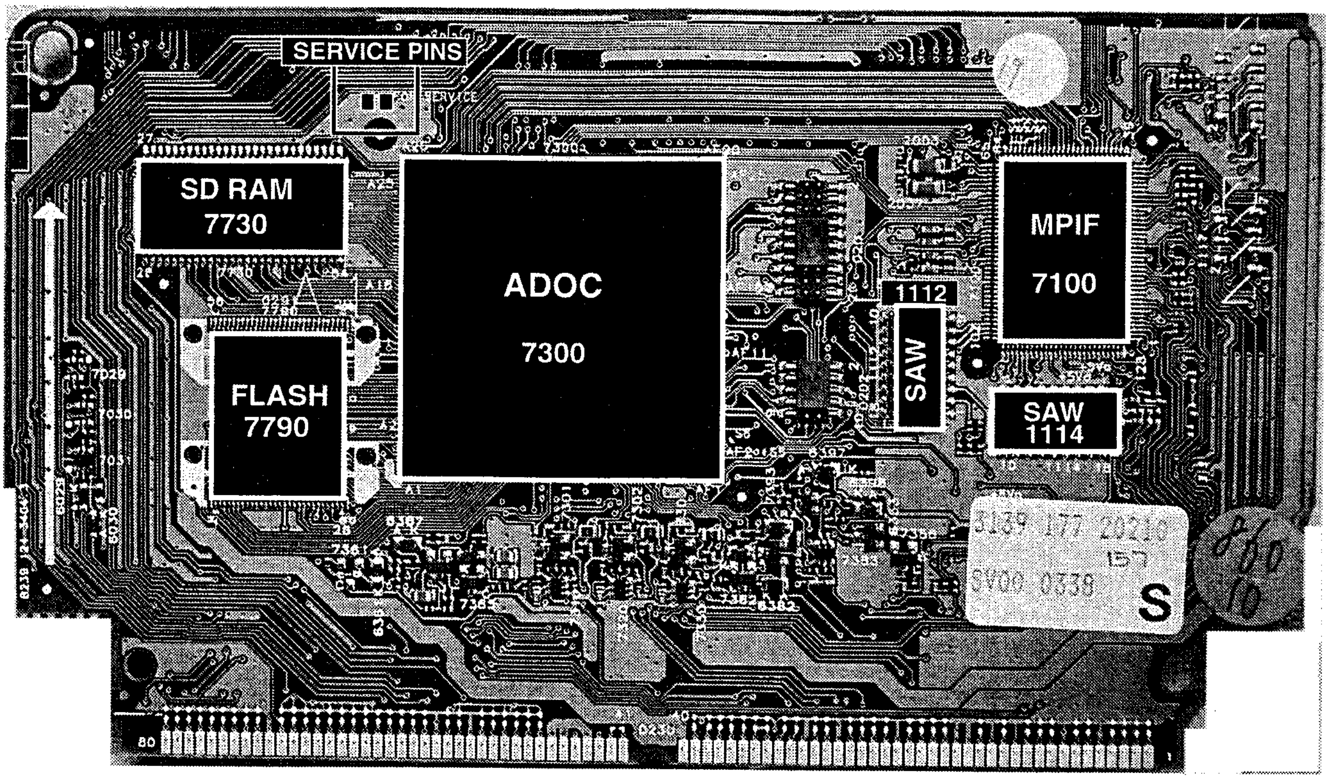
The main functionalities of the SSB are:

- Tuner input,
- I/O interface provisions,
- TXT and Control,
- Video and Audio decoding,
- Feature Box,
- Sync and Geometry control.

Further features of the SSB are:

- The PIP functionality (when present) is integrated on the SSB.
- The 3D Comb filter functionality (for USA) is integrated on the SSB.

On the photographs you can see where the key components are located on the SSB:


SERVICE PINS
SD RAM
7730
FLASH
7790
ADOC
7300
1112
SAW
MPIF
7100
SAW
1114
S

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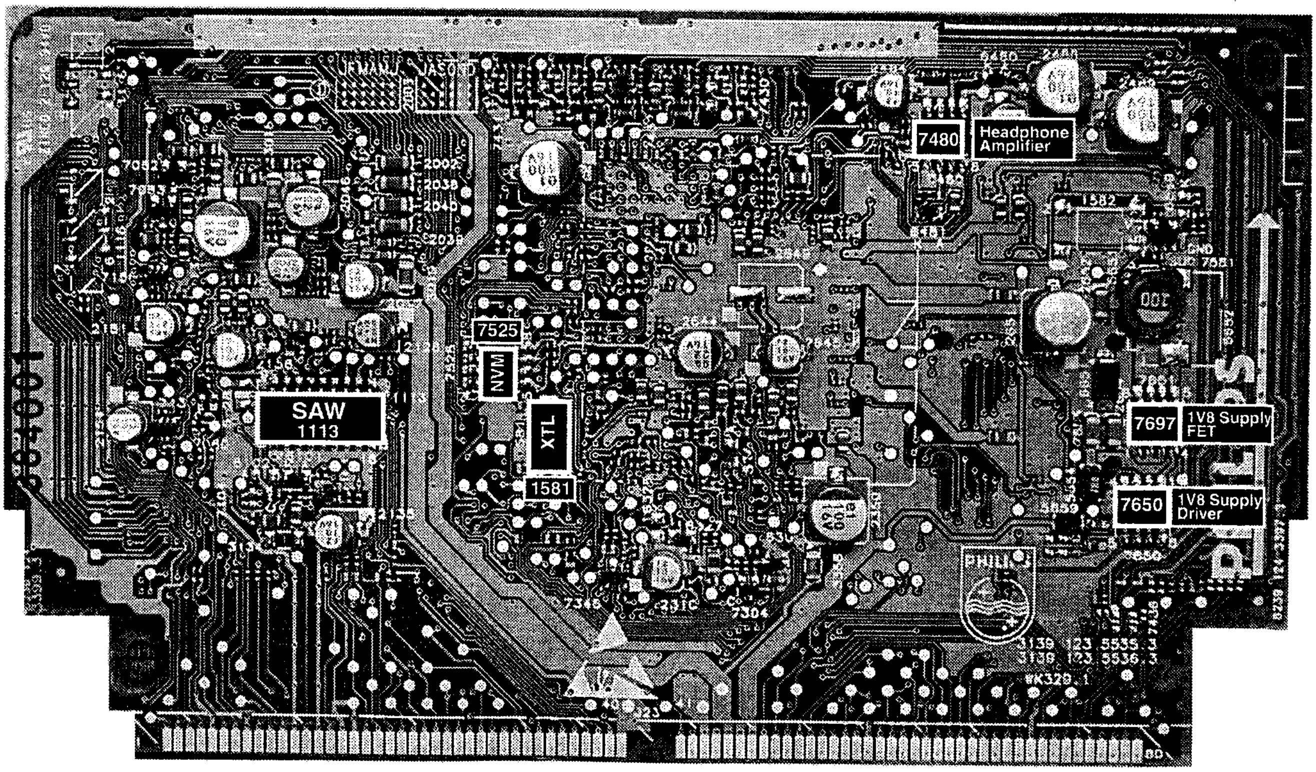
281003

Figure 9-1 SSB top view (tuner side)


7480
Headphone Amplifier
7525
NVM
XTL
1581
SAW
1113
7697
1V8 Supply FET
7650
1V8 Supply Driver

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271003

Figure 9-2 SSB bottom view (LOT side)

9.2 Block Diagrams

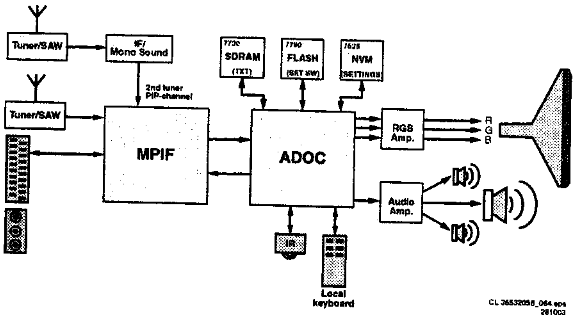


Figure 9-3 Chassis block diagram

The tuner is a PLL tuner and delivers the IF-signal, via audio and video SAW-filters, to the MPIF IC (Multi Platform InterFace). This is an analogue video and audio pre-processing unit for the ADOC TV processor. It contains the high frequent IF part and all the analogue video and audio source switching for external in- and outputs. The MPIF can handle CVBS, Y/C, RGB (1fH/2fH) and YPbPr (1fH/2fH) video signals as well as stereo, I2S, and second sound IF audio signals. The MPIF converts the selected video and audio streams from the analogue to the digital domain. Via three high-speed serial data links (I2D), the digitised audio and video signals are streamed to the ADOC IC for further processing.

The ADOC (Analogue Digital One Chip) is a fully integrated, digitally implemented TV processor for audio, video, Vertical Blank Interval services, graphics, and control. It is a global, multi-standard system primarily designed for the reception and processing of analogue broadcast signals.
Internal video processing is done in the ADOC with YUV-signals. It also handles the video control, geometry part, and the insertion of the TXT/OSD RGB-signals. The video part delivers the RGB signals to the CRT-panel and the geometry part delivers the H-drive, V-drive (differential output), and E/W-drive.
An integrated MIPS 1910 processor runs the chassis software and takes care of the set control, error generation TXT/OSD input-, and output processing. The NVM (Non Volatile Memory) is used to store the settings, the Flash-RAM contains the set software, and the SDRAM stores the Teletext pages (in some versions, this is stored in the internal memory of the ADOC).

Both deflection circuits are located on the LSP and are driven by the ADOC. The horizontal output stage generates also some supply voltages and the EHT-, focus- and Vg2-voltages.

The RGB amplifiers on the CRT-panel are integrated in one IC and are supplied with 200 V from the LOT. The SCAVEM circuit modulates transitions of the Luminance (Y) signal on the horizontal deflection current, giving a sharper picture.

Sound IF processing, audio source selection, and audio analogue-digital signal conversions are done in the MPIF IC. The ADOC contains a digital TV sound processor for analogue and digital multi-channel sound systems in TV sets. By hardware programming, several applications can be scaled. The audio output stage is built around a balanced amplifier, and is located on the LSP. It uses a monolithic integrated power amplifier IC, the TDA7497. The gain of the amplifier is constant. This means that volume control is done via the ADOC.

The power supply is a Switch Mode Power Supply (SMPS) with minimum voltage switch. It is a flyback converter with primary current sensing, secondary voltage sensing, and mains input measuring. It is built around IC7921 (which has a built-in MOSFET and control circuit) and generates a.o. the 140 V (V-BAT) and the 27 V (for the audio part).
During Standby, the power supply is switched to a 'low power burst mode' via TS7946 and the following burst mode generator, in order to reduce the power consumption.
A relay is used to switch the degaussing circuit for several seconds during switching 'ON' of the set.
There is a separate Standby Supply, in order to reduce the Standby power consumption. During Standby, the Main Supply is switched "off" (via TS7529).
A relay (1550) is used to switch the Degaussing circuit. It is switched "on" after set start-up and switched "off" by the microprocessor after 12 s.
The Main Supply, a SMPS based on the "boost converter" principle, generates the 141 V (V_BAT) and the +/- 16 V for the audio part.

9.3 Power Supply

9.3.1 Introduction

The power supply circuitry is located on the large signal PWB, together with the audio amplifier and the deflection. It comprises of:

- Mains entrance with fuse.
- Separate standby -supply.
- Mains harmonic circuit.
- Mains rectifier.
- Main-supply: is able to deliver a continuous power between 100 W and 160 W.
- Degaussing.

For a detailed circuit description, see the EM5E Service Manual.

9.3.2 Power Supply architecture

The A02 SSB is supplied by +5V, +5.2V, +3.3V and +8V supply lines from the LSP. The SSB contains:

- A DC/DC converter which steps down +5.2V to +1V8,
- A switch to cut off the 3V3 supply to the 3D Comb in "Standby" mode, and
- A regulator to generate the 2V5.

When the set is in “Power STANDBY” mode, the +5.2V, +3.3V supply lines are present. Consequently, only the ADOC IC (+3V3 and +1V8), the SDRAM (+3V3), the Flash memory (+3V3), and the NVM memory (+3V3) are supplied. Other than NVM, all the other devices are powered down in "Standby" mode. See section below for more details on the power modes.

OFF Mode
The set is completely switched "off" from the mains. This is done with the mains switch for Europe and AP (for NAFTA it would mean disconnecting the TV from the mains by pulling out the mains cable). Depending upon the last Standby Status (stored in NVM), this mode can transit to “ON' mode or “STANDBY” mode.
The transition timing for a Cold start from “OFF” state to “ON” shall be such that from the instance the ADOC gets a hard reset, within 3 seconds one will hear the audio and within 7 seconds one will see the picture.

ON Mode
This is the normal operating mode. All the power supply lines on the A02 SSB and LSP are available. All the circuits in the set are active. From this mode, it is possible to transit to “STANDBY”, “SEMI-STANDBY”, “PROTECTION”, or “OFF” mode.

STANDBY Mode
The total power consumption of the TV set in this mode is equal or less than 1 W. The Standby state will be indicated by the LED. In this state only the ADOC, SDRAM, Program Memory, NVM, and all means to wake-up the set are powered. Rest of

the A02 sub-systems are disconnected. This is controlled by a STANDBY control port.
The transition timing from "STANDBY" to "ON" state is such that within 3 seconds, one will hear the audio and within 7 seconds, one will see the picture. From this mode, it is possible to transit to "ON", "SEMI-STANDBY", or "OFF" mode.

SEMI-STANDBY Mode

All the circuits in the set (ADOC, MPIF, etc), except the Audio output, Deflection, and hence CRT display, are powered up and fully active. The Audio Mute is activated. The set, however, will appear to behave and to look like "STANDBY" mode to the user. The user is totally oblivious of the existence of this mode. The status of the power supply lines and the estimated total power consumption of the SSB are the same as "ON" mode.
In this mode, the ADOC ICs horizontal deflection drive output is disabled, while the STANDBY control port is disabled. This consequently causes the LOT stage on the LSP to be inactive (although V_batt voltage is present) that, in turn, will cause the EHT to be cut off. This in turn will cause the CRT display to be inactive.
From this mode, it is possible to transit to "ON" mode, "STANDBY" mode, "PROTECTION" mode or "OFF" mode.

PROTECTION Mode

Power profile for protection mode is as low as required to allow "soft" diagnostics, error detection, and to indicate LED flashes to flag the type of fault. The horizontal deflection is "OFF" in this mode. From the protection mode, the only possible transition is to "OFF" mode.

9.3.3 Start Up Sequence

1. When we start the set (cold start), initially 5V2, 3V3, and 1V8 will be available. These come from the Standby module of the power supply.
2. After this, the microprocessor resets (tied to 1V8 and 3V3 supplies) and checks the last status of the supply from the NVM. Accordingly, the set will be put in STANDBY or in the normal ON condition.
3. Now, 5V and 8V are available if the last status was ON condition, and the DOP is initialised by the microcontroller through the PI bus (not via the I2C).
4. The H-drive will become available from the DOP, which is the source for the SUP_ENABLE signal.
5. Via the "SUP-ENABLE" signal, the Main Supply is switched "on" and will deliver the V_BAT to the Line deflection stage.
6. EHT generation is now started.
7. The uP will un-blank the picture.
8. When you switch "off" the set, this is done in a controlled way via the POR (Power On Reset) signal.

Note: Standby is controlled by the STANDBY Line of the uP (not by the DOP).

9.3.4 Shut Down Sequence

This section describes the processes that need to be handled by hardware and software when power is disconnected from the set.
Some system requirements:

- To handle CRT discharge.
- To handle "switch off" plops.
- To prevent NVM corruption at switch "off".
- To effectively distinguish between the condition of mains interruptions and shutdown and handle them properly.
- The "power down" detection is acquired from the deflection supply (+11V) and the level is translated to +3.3V (this event has the highest interrupt priority to trigger SW shutdown procedure).
- Power down detection is fed to the FBCIN input, initiates a slow stop, and hence ensures CRT discharge (it is important that the slow-stop is maintained for at least 50 ms to assist good discharge).
- The microcontroller, hence the system, shall have a clean power "on" and power "off" reset with respect to its supply. The microcontroller shall not be operational when the supply voltage is below the recommended limits. The transition between active and reset is fast.
- The microcontroller "off" reset must occur much later (> 45 ms) than the POWER DOWN signal (P.DN).

When the POWER DOWN interrupt occurs, there is no way of knowing whether it is due to Medium Mains Interruptions or due to shutdown. Hence, there is no choice but to initiate shutdown procedure as described further below. The definition of Mains Interruption is given below:

- **Short Mains Interruptions.** Duration of the interrupts <= 55 ms. The set shall continue to work properly. The "power off" acquisition circuit shall filter such events.
- **Medium Mains Interruptions.** Interruptions are of the order 70 to 80 ms. This is a typical situation when the "power off" acquisition circuit, signals that the power is going down but the microcontroller does not get a reset. In this condition, a POWER DOWN signal is generated but no POWER OFF RESET signal is available.
- **Long Mains Interruption or Shutdown.** Any interrupt above 80 ms shall cause a microcontroller reset and hence a cold start. This happens, when the power is disconnected long enough to get a "Power Off Reset" as well as the microcontroller reset. After this situation, the system would automatically cold start when the power resumes.

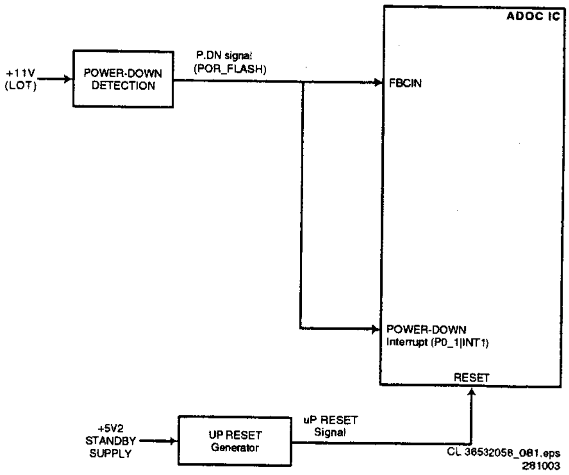


Figure 9-4 Shut down block diagram

Shutdown Procedure

1. Exclude all processes and do not respond to any interrupts - including RC events. However, during the following defined conditions of stopping the deflection (DFL-bit= 0), ignore the P.DN interrupt and rest of the procedure:
   - The system switched from ON to Standby by the user.
   - Protection event that forces the H-Deflection to stop.
   - Any other SW controlled event that causes the deflection to stop.
2. Since the P.DN signal is connected to FBCIN input, the DOP shall slow stop immediately - no software intervention is required. The precondition for this is that the FBDM bit in DOP is set to "1". The slow -stop process will continue for the next 40 ms or so.
3. Mute Audio Output / Sound Enable line.
4. Mute audio external outputs (in ADOC).
5. Set the DFL-bit to "0", such that deflection shall not restart after the slow -stop process is done.
6. Disable NVM access. Do the following:
   - Put the NVM in standby state to stop I2C write to NVM, by sending the Universal Reset Sequence.
   - Set Write Enable high: this avoids any further Write sequence to the NVM.
7. Disable all the I2C hardware communication.

8. Wait for 200 ms and execute a cold start when there is no microcontroller-reset signal. This is considered as "medium mains interruption".
9. After the cold start, the set should resume to the last status of user settings.

9.4 Video

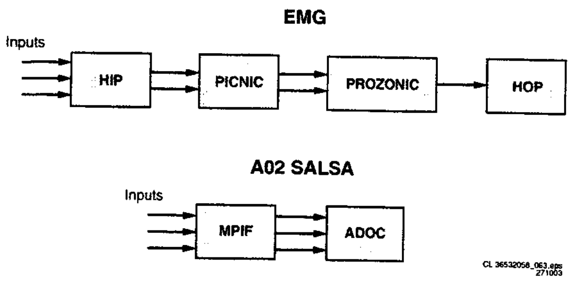


Figure 9-5 Signal processing A02- versus EMG-chassis.

The SALSA video processing part is a highly integrated solution. It comprises only two ICs, the ADOC (Analogue Digital One Chip) and the MPIF (Multi Platform InterFace), while in the EMG-chassis, this was handled by four ICs (HIP, PICNIC, PROZONIC, and HOP).
The MPIF uses a nominal 8V and 5V supply, while the ADOC requires nominal supplies of 1.8V and 3.3V.

The video processing of the SALSA system can be spilt into six parts:

- Initial source selection and analogue to digital conversion performed by MPIF.
- Demodulator (VIDDEC) performed by the ADOC.
- Front End Features (FEF) performed by the ADOC.
- Memory Based Features (MBF) performed by the ADOC.
- Back End Features (BEF) performed by the ADOC.
- Digital Output Processing (DOP) performed by the ADOC.

9.4.1 MPIF Analogue Frond End

Introduction
The MPIF (Multi Platform InterFace, type number PNX3000, item number 7100) is an analogue video and audio pre-processing unit for the ADOC TV processor. It contains the high frequent IF part and all the analogue video and audio source switching for external in- and outputs. The MPIF can handle CVBS, Y/C, RGB (1fH/2fH) and YPbPr (1fH/2fH) video signals as well as stereo, I2S, and second sound IF audio signals. The MPIF converts the selected video and audio streams from the analogue to the digital domain. Via three high-speed serial data links (I2D), the digitised audio and video signals are streamed to the ADOC IC for further processing. Following figure shows the MPIF block diagram.

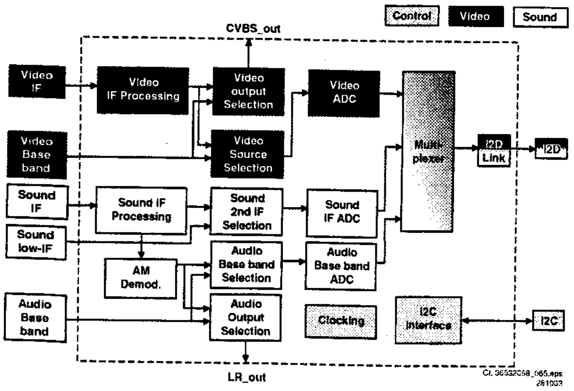


Figure 9-6 MPIF block diagram

Some MPIF features:

- IF Processing:
  - Amplifier, AGC.
  - Down mixer to base band.
  - Sound trap, low pass filter.
- Video base band switching:
  - CVBS, Y/C.
  - RGB, YPbPr (1fH/2fH).
- Audio base band switching.
- Video and audio A/D conversion.
- I2D formatter:
  - Data transfer to ADOC.
- SCART output buffers.

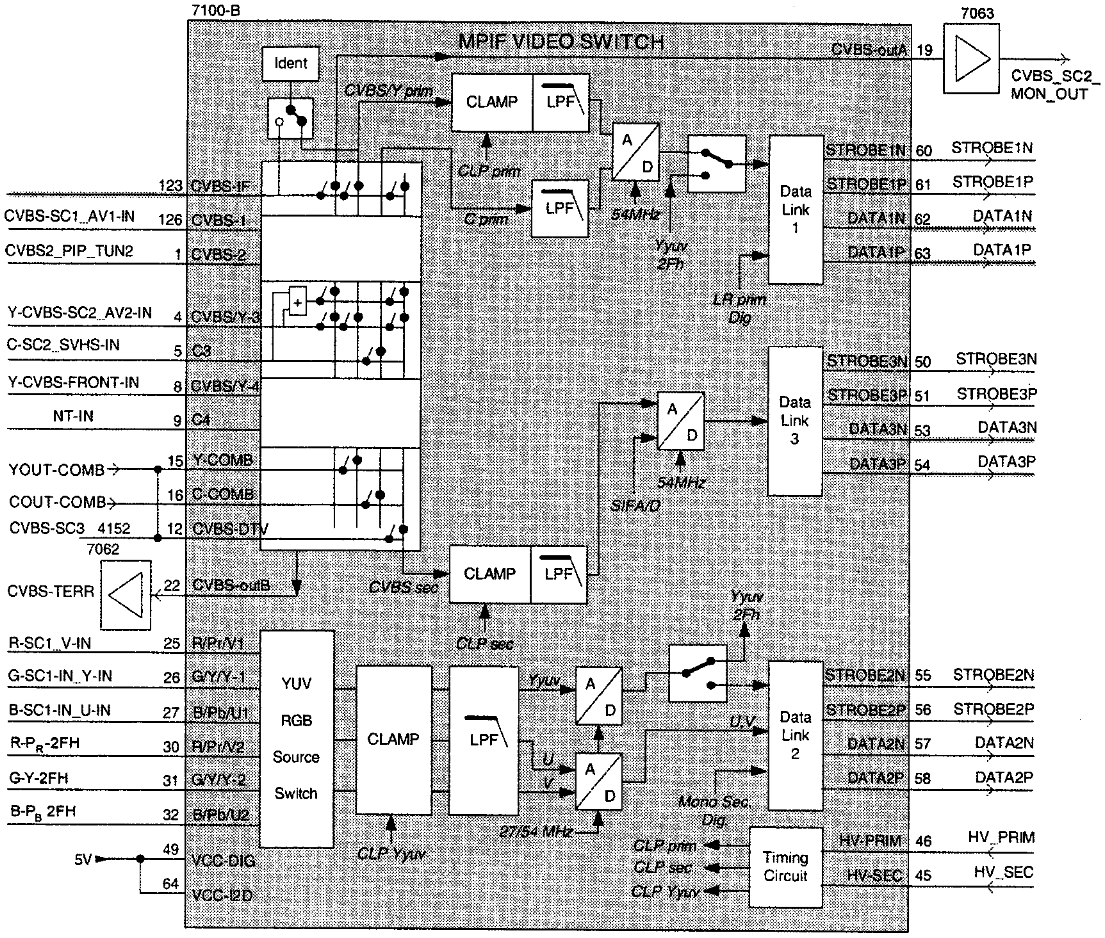
Vision IF
The video signal is demodulated by means of an alignment-free PLL carrier regenerator with an internal VCO. This VCO is calibrated by means of a digital control circuit, which uses an external crystal frequency as reference. The frequency setting for the various standards (33.4, 33.9, 38.0, 38.9, 45.75 and 58.75 MHz) is realised via the I2C bus.
The AFC output is generated by the digital control circuit of the IF-PLL demodulator and can be read via the I2C bus.
The AGC-detector operates on top sync or top white level.
The MPIF IC has an integrated sound trap filter. The trap frequencies can be switched via the I2C-bus.
Also, a group delay correction filter is integrated. The filter can be switched between the PAL BG curve and a flat group delay response characteristic. This has the advantage that in multi-standard receivers the video SAW filter does not need to be switchable (cost effective).

Sound IF
The MPIF has a separate sound IF input to enable Quasi Split Sound (QSS) applications. The sound IF amplifier is similar to the vision IF amplifier and has a gain control range of about 55 dB.
The AGC detector measures the SIF carrier levels (average level of AM or FM carriers) and ensures a constant signal amplitude for the AM demodulator and QSS mixer.
For applications without SIF SAW filter, the IC can also be used in intercarrier mode. In this mode, the composite video signal from the VIF amplifier is fed to the QSS mixer and converted to the intercarrier frequency. AM sound demodulation is realised in the analogue domain with the QSS mixer.

Source Selection
The following selector parts can be identified:

- **CVBS/YC source selector.** The video input selector consists of four independent source selectors, that can select between the CVBS signal coming from the IF part and four external CVBS signals. Two of the external CVBS inputs can also be used as YC input. One selector is used for selection of the primary video channel. A second selector selects the CVBS or YC signal for the secondary channel. The third and fourth selectors are used for selection of analogue CVBS outputs A and B for SCART or line output. The primary channel can be a CVBS or YC signal. If an YC signal is selected for the secondary channel or external CVBS outputs A or B, the luminance and chrominance signals are added so that a CVBS signal is obtained. The video identification circuit detects the presence of a video signal on the CVBS_IF input (CVBS0). The identification output can be read via I2C bus and is normally used to detect transmitters during search tuning.
- **RGB/YPbPr source selector.** The IC has two RGB inputs. Both inputs can also be used as YPbPr input for connection of video sources with an YPbPr output like a DVD player. The RGB inputs can also be used for fast insertion of RGB signals (for instance on screen display menu's) in the primary CVBS signal. The fast insertion switch is located in the digital video processor. The RGB signals are converted to YUV before further processing. The YUV output signal is digitised with the help of two A to D converters. The U and

V components have half the bandwidth of the Y signal, because the U and V signals are multiplexed and digitised with the help of **one** A to D converter.


7100-B
MPIF VIDEO SWITCH
7063
Ident
CVBS/Y prim
CLAMP
LPF
CLP prim
C prim
A
D
54MHz
Yyuv 2Fh
LR prim Dig
Data Link 1
CVBS-outA 19
CVBS_SC2_MON_OUT
STROBE1N 60 STROBE1N
STROBE1P 61 STROBE1P
DATA1N 62 DATA1N
DATA1P 63 DATA1P
123 CVBS-IF
CVBS-SC1_AV1-IN 126 CVBS-1
CVBS2_PIP_TUN2 1 CVBS-2
Y-CVBS-SC2_AV2-IN 4 CVBS/Y-3
C-SC2_SVHS-IN 5 C3
Y-CVBS-FRONT-IN 8 CVBS/Y-4
NT-IN 9 C4
YOUT-COMB 15 Y-COMB
COUT-COMB 16 C-COMB
CVBS-SC3_4152 12 CVBS-DTV
7062
CVBS-TERR 22 CVBS-outB
SIFA/D
Data Link 3
STROBE3N 50 STROBE3N
STROBE3P 51 STROBE3P
DATA3N 53 DATA3N
DATA3P 54 DATA3P
CVBS sec
CLP sec
R-SC1_V-IN 25 R/Pr/V1
G-SC1-IN_Y-IN 26 G/Y/Y-1
B-SC1-IN_U-IN 27 B/Pb/U1
R-P$_R$-2FH 30 R/Pr/V2
G-Y-2FH 31 G/Y/Y-2
B-P$_B$ 2FH 32 B/Pb/U2
YUV RGB Source Switch
CLP Yyuv
Yyuv
U
V
U,V
27/54 MHz
Mono Sec. Dig.
Data Link 2
STROBE2N 55 STROBE2N
STROBE2P 56 STROBE2P
DATA2N 57 DATA2N
DATA2P 58 DATA2P
5V 49 VCC-DIG
64 VCC-I2D
CLP prim
CLP sec
CLP Yyuv
Timing Circuit
HV-PRIM 46 HV_PRIM
HV-SEC 45 HV_SEC

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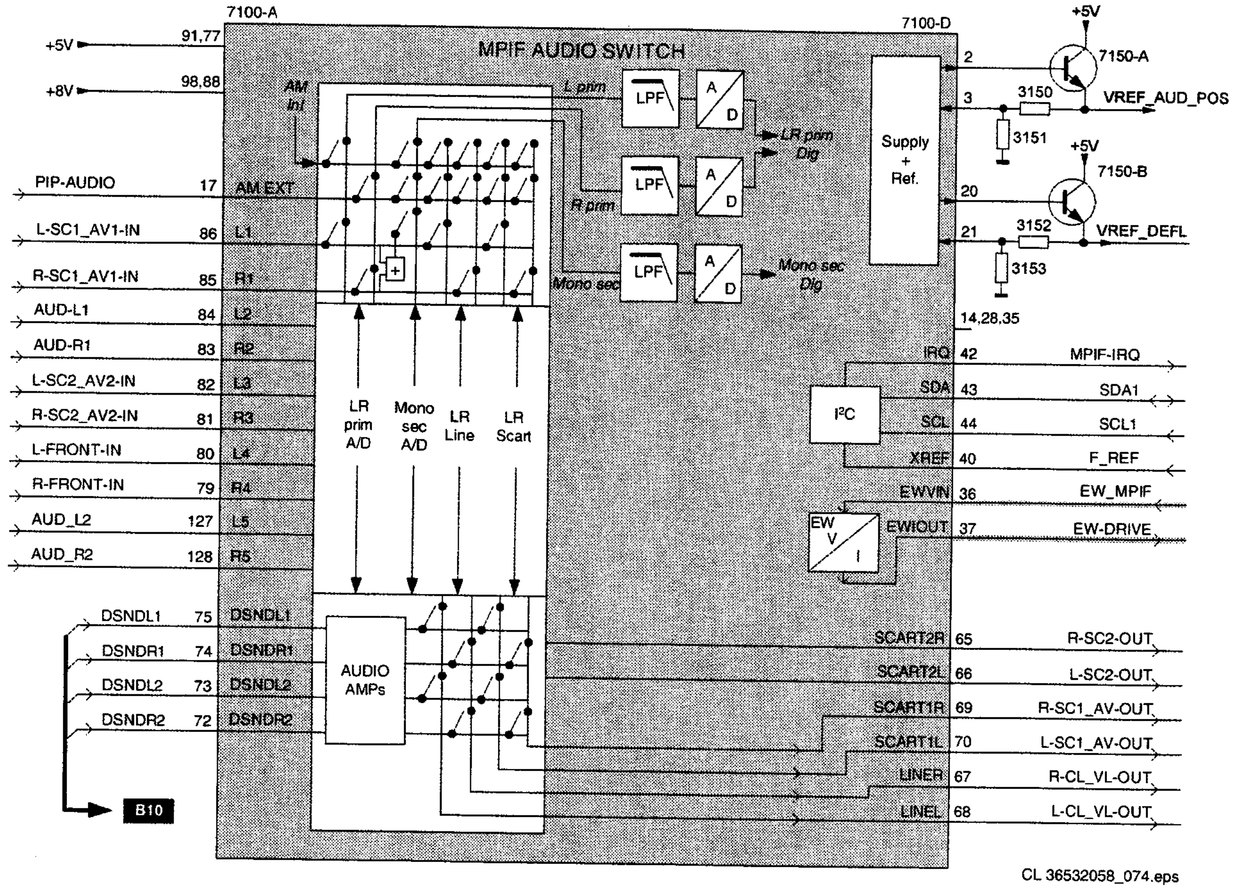
071003

Figure 9-7 MPIF Video source selection

- **Audio source selectors.** The MPIF contains two different audio source selectors. The first selector selects which audio signals are routed to the audio ADCs for further processing in the digital domain. The selector has two outputs, a primary channel and a secondary channel:
  - The primary audio channel is used for one stereo signal. The secondary audio channel can carry a second stereo signal or AM sound signal.
  - The second selector selects which audio signals are fed to the analogue audio outputs for SCART and line out. This selector has also two stereo inputs for demodulated sound signals coming from the digital video processor.


7100-A
MPIF AUDIO SWITCH
7100-D
+5V 91,77
+8V 98,88
AM Int
PIP-AUDIO 17 AM EXT
L-SC1_AV1-IN 86 L1
R-SC1_AV1-IN 85 R1
AUD-L1 84 L2
AUD-R1 83 R2
L-SC2_AV2-IN 82 L3
R-SC2_AV2-IN 81 R3
L-FRONT-IN 80 L4
R-FRONT-IN 79 R4
AUD_L2 127 L5
AUD_R2 128 R5
DSNDL1 75 DSNDL1
DSNDR1 74 DSNDR1
DSNDL2 73 DSNDL2
DSNDR2 72 DSNDR2
B10
L prim
R prim
Mono sec
LPF
A D
LR prim Dig
Mono sec Dig
LR prim A/D
Mono sec A/D
LR Line
LR Scart
AUDIO AMPs
Supply + Ref.
+5V
2
7150-A
3
3150
VREF_AUD_POS
3151
+5V
7150-B
20
21
3152
VREF_DEFL
3153
14,28,35
IRQ 42 MPIF-IRQ
SDA 43 SDA1
SCL 44 SCL1
XREF 40 F_REF
EWVIN 36 EW_MPIF
EWIOUT 37 EW-DRIVE
I²C
EW V I
SCART2R 65 R-SC2-OUT
SCART2L 66 L-SC2-OUT
SCART1R 69 R-SC1_AV-OUT
SCART1L 70 L-SC1_AV-OUT
LINER 67 R-CL_VL-OUT
LINEL 68 L-CL_VL-OUT

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071003

Figure 9-8 MPIF Audio source selection

A to D Converters

The MPIF contains four video ADCs for analogue and digital video broadcast signals. The clock frequency for these ADCs is either 27 MHz or 54 MHz. In some cases, two analogue signals are multiplexed at the input of one ADC. In these cases, the clock frequency of the ADCs is 54 MHz, while the sample frequency for each of the two signals is 27 MHz.

The sample frequency for standard 1fH video signals is 27 MHz.
For the YUV channel the sample frequency of the U and V components is half the sample frequency of the Y signal.
For 2fH YPbPr or RGB input signals (for instance 480p or 1080i ATSC signals), the frequency that is used to sample the YUV signals is twice as high as for 1fH signals. The sample frequency is 54 MHz for Y and 27 MHz for U and V.
Due to the high sample frequency, two data links are needed for transport of the video data to the digital video processor.

9.4.2 Data Link Interface (I2D)

The digital interface between MPIF and ADOC is called Data Link (or I2D Link). Data Link is a pin efficient, EMC friendly and power efficient serial interface that transfers the data from MPIF to ADOC over three Data Link interfaces. Each Data Link has a data signal and a strobe signal. The synchronisation information is distributed over the data and the strobe signal. To minimize EMC, both signal outputs are low voltage differential swing signals, with a swing of about 300 mV.
Each Data Link has four lines, one differential pair for the data, and one differential pair for the strobe. The data rate is 594 Mbit/s. Each Data Link can carry two 27 MHz sampled video streams (or one 54 MHz sampled 2fH video stream) and two audio channels sampled at 6.75 MHz.

In the MPIF, the (video and audio) data to be transmitted is multiplexed in an output register of 42 bits. The content of that 42 bits register is serial transmitted on one of the three data links. In the ADOC, the serial data is de-multiplexed into parallel streams. The data on the data link is divided in several groups of signals (video, audio and strobe signals). Obvious it is important that the transmitter and receiver are in the same transmitting mode.

9.4.3 ADOC Digital TV Processor

Introduction

The A02 system is built around the ADOC IC. This chip implements all TV functions in digital technology. Only a few functions (like AD-conversion, IF processing and source select) are implemented in an analogue companion IC, the MPIF.
The ADOC (Analogue Digital One Chip, type number PNX3001-3008, item number 7300) is a fully integrated, digitally implemented TV processor for audio, video, VBI services, graphics, and control. It is a global, multi-standard system primarily designed for the reception and processing of analogue broadcast signals.
An integrated MIPS 1910 processor runs the chassis software. This software is stored in a non-volatile external flash memory (item 7790). Following figure shows the ADOC block diagram.

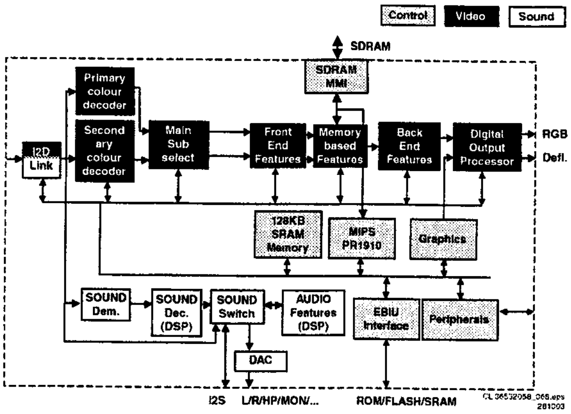
Control
Video
Sound
SDRAM
SDRAM MMI
Primary colour decoder
Secondary colour decoder
I2D Link
Main Sub select
Front End Features
Memory based Features
Back End Features
Digital Output Processor
RGB
Defl.
128KB SRAM Memory
MIPS PR1910
Graphics
SOUND Dem.
SOUND Dec. (DSP)
SOUND Switch
AUDIO Features (DSP)
EBIU Interface
Peripherals
DAC
I2S
L/R/HP/MON/...
ROM/FLASH/SRAM
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Figure 9-9 ADOC block diagram

The dual stream architecture of the ADOC system allows audio and video processing of two A/V sources simultaneously. The two video streams can be displayed in several programmable ways (main screen, PIP or DW). The two audio streams are audible via the TV loudspeakers and/or the headphones.
For the memory-based features (like scan rate conversion, 3D-Comb filtering, dynamic noise reduction, and PIP/DW applications), external SDRAM is used (item 7730).
The ADOC also has 128 kBytes of internal SRAM memory. This memory is used to run low latency, timing critical parts of the software. The internal memory is also used if the system operates in a single scan 50/60 Hz interlace application without any other kind of memory based features. Under these circumstances, no external SDRAM is needed.

Some ADOC features:
- Video Decoding:
  - 2-Colour Decoder (PAL, NTSC, SECAM).
  - 2D and 3D Comb filter.
- Memory Based Features:
  - PIP/DW, DNR, Scan Rate conversion.
- Picture Improvements:
  - CTI, LTI, Colour correction.
- Digital Output Processor:
  - RGB processing, Scavem, Deflection control.
- Audio Processing:
  - Demodulator/Decoder (A2, NICAM, BTSC).
  - Tone, Volume, Balance, Dolby ProLogic.
- VBI (Vertical Blank Interval) Services:
  - Teletext, Closed Caption, V-chip.
- TV Control:
  - I2C, UART, IR, Keyboard.
- Graphics:
  - Character based.

Video Decoding (VIDDEC)

The Video Decoder (VIDDEC) is the video input processor and colour decoder. There are two VIDDECs: the primary and the secondary VIDDEC. The VIDDEC processes all CVBS, Y/C, and 1fH/2fH component (e.g. RGB) video input signals.

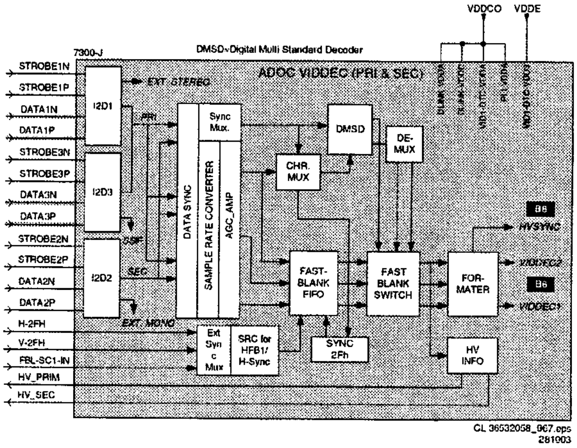
VDDCO
VDDE
7300-J
DMSD=Digital Multi Standard Decoder
ADOC VIDDEC (PRI & SEC)
STROBE1N
STROBE1P
DATA1N
DATA1P
STROBE3N
STROBE3P
DATA3N
DATA3P
STROBE2N
STROBE2P
DATA2N
DATA2P
H-2FH
V-2FH
FBL-SC1-IN
HV_PRIM
HV_SEC
I2D1
I2D3
I2D2
EXT STEREO
PRI
SEC
EXT MONO
DATA SYNC
Sync Mux.
SAMPLE RATE CONVERTER
AGC_AMP
DMSD
DE-MUX
CHR. MUX
FAST-BLANK FIFO
FAST BLANK SWITCH
FOR-MATER
HV INFO
SYNC 2Fh
Ext Sync Mux
SRC for HFB1/ H-Sync
B8
HVSYNC
VIDDEC2
B6
VIDDEC1
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Figure 9-10 VIDDEC block diagram

Primary VIDDEC (1fH/2fH)
The primary VIDDEC supports the following functionality:
- Conversion of the digitised samples from MPIF into orthogonal samples (meaning fixed number of pixels per line, independently of line frequency).
- Correction for any amplitude errors of the input signals (CVBS, YC, or YCbCr) by means of an Automatic Gain Control (AGC).
- Standard detection of PAL/NTSC or SECAM and various 1fH/2fH component input formats.
- Colour decoding for PAL, NTSC, or SECAM input signals.
- Sync identification (to be used for channel search).
- Sync processing for any 1fH or 2fH input signal.
- Fast-blank insertion of RGB signals (supplied via MPIF) on CVBS input signals.
- 2D Comb filtering. 3D Comb filtering is implemented in the Memory Based Feature block of the Feature Box.

Secondary VIDDEC (1fH)
The secondary VIDDEC is mainly intended for use with PIP/DW. It supports the following functionality:
- Conversion of the digitised samples from MPIF into orthogonal samples (meaning fixed number of pixels per line, independently of line frequency).
- Correction for any amplitude errors of the input signals (CVBS) by means of an Automatic Gain Control (AGC).
- Standard detection of PAL/NTSC or SECAM and various 1fH component input formats.
- Colour decoding for PAL, NTSC, or SECAM input signals.
- Sync identification (to be used for channel search).
- Sync processing for any 1fH input signal.
- CVBS 1fH input signals only.

Data Synchroniser and Sample Rate Converter
The data synchroniser is a de-multiplexer that separates the UV stream into a separate U and V data stream. The sample rate converter converts the video samples from the crystal clock domain to the so-called line locked clock domain, 720 pixels per line.

Automatic Gain Control (AGC)
The AGC amplifier block controls the gain of the signal and is controlled directly by the chassis software. This gain will depend on the amplitude of the output signal (signal amplitude and/or sync amplitude) as measured by the AGC gain block. As a secondary function, it controls both the offset at the input and the offset at the output of the gain control.

Digital Multi Standard Decoder (DMSD)
This DMSD block contains the following functionality:

- Decodes a CVBS or Y/C (primary VIDDEC) signal and converts it to an YCbCr signal format. All world colour standards are supported.
- YC detection (primary VIDDEC) via a SW algorithm.
- 50/60 Hz, interlace/progressive, field polarity, and no-YC detection.
- A chroma notch with programmable width.
- 2D Comb filter (primary VIDDEC). The 3D Comb filter uses the attached SDRAM memory and is implemented in the FBX.
- Macro vision detection.

Comb Filter

The ADOC 2D comb works purely in the vertical direction, but can bypass the entire signal as luminance straight away. The 2D comb uses the 180 degrees phase shift of the colour carrier between successive lines or two lines apart. Adaptive two or four delay lines 2D Y/C comb filtering is only possible for sources routed onto the Main-Video path.

In the 3D comb filter implementation (for USA only), the 2D comb filter processing in ADOC IC (on the Main-Video path) is disabled via SW. The signal input for the 3D YC comb-filter circuit is derived from the CVBS-SC2_MON-OUT signal path. The processed signal is re-inserted back via YCOMB and CCOMB inputs of the MPIF IC.

Standard Detection

The Standard Detection part identifies PAL/NTSC/SECAM/BW but also involves Horizontal and Vertical sync identification (both 1fH and 2fH) as well as YC detection (via a SW algorithm).

YUV Multiplexer

The YUV mixer selects between the YUV output of the DMSD and 1fH component video input signals (RGB, YPbPr) or 2fH input signals (RGB, YPbPr, ATSC). The YUV mixer can also be controlled via a fast blanking input (SCART) to insert RGB signals, such as descrambler OSD or full RGB insertion of DVD players.
When a 2fH input signal is selected as a input, the complete primary VIDDEC is running at 2fH (54 MHz), including DMSD (in this scenario, the DMSD cannot be used any more for CVBS input signals, and as such, VBI data slicing cannot be done).

Feature Box

The Feature Box (FBX) in the ADOC can be divided into three functional parts: The front-end features (FEF), memory-based features (MBF), and back end features (BEF).

The FEF part of the FBX implements all signal analysis functions as well as black stretch and histogram correction.
The MBF part applies spatial scaling, temporal noise reduction and up-conversion to either progressive scan or a double field rate (100 Hz).
The BEF part implements spatial picture enhancement functions like sharpness and colour enhancement functions, sharpness measurement and horizontal scaling and panorama The FBX has two video inputs coming from VIDDDEC 1 and 2, and outputs one RGB video stream to the display output processor (DOP).
The following sections describe the three functional parts of FBX in more detail.

Front End Features (FEF)

The FEF consists of several signal analysis functions (HME, BLD, BBD, NEST), histogram correction (HMO) and black-stretch (BS). Following figure shows the functional block diagram of the video frond-end features (FEF). All signal processing in the FEF is nine bits based.
The FEF has two video inputs coming from the VIDDECs. For every block, one video source can be chosen as input, independently for every block. The FEF has two video outputs, designated as "main" and "sub".
Histogram modification can only be performed on the main channel; therefore, the HME block is general connected to the same video source as the main channel. Besides the two VIDDEC inputs, there is also a third virtual input, the "blanking" input. Only main and sub can be connected to this blanking input, and at the same time, it can be specified which sync source has to be used (VIDDEC1 or VIDDEC2).

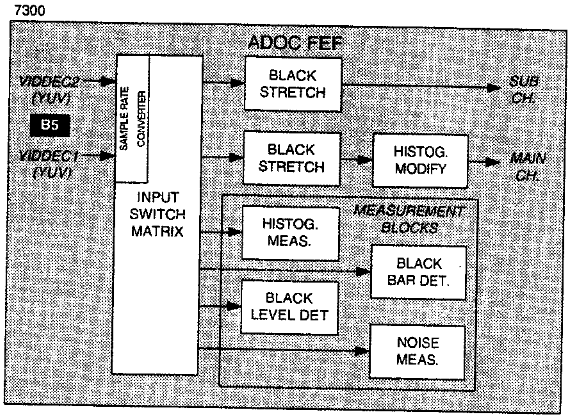

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Figure 9-11 FEF block diagram

When a single stream is displayed, the main output is used for this stream. Also, all signal analysis functions should be connected to the same VIDDEC as the main channel is connected to.
When two streams are displayed, then there are two user scenarios: Picture In Picture (PIP) and Double Window (DW). In the PIP scenario, the full screen picture is displayed via the main channel, and the PIP stream is switched to sub. In the DW scenario, selection of the video sources for main and sub depends on if the two streams have a different vertical resolution and how the system has to cope with this difference.

Following blocks are present:

- **Black Stretch (BS).** The function of BS is to pull the dark areas in a picture to even darker levels. BS is available in both the main and sub channel.
- **Histogram (HMx).** This block measures of every field in a programmable (measurement-) window the histogram of the luminance signal. The measurement window is set-up such that the area that contains the subtitles or black bars does not contribute to the histogram.
- **Black Bar Detection (BBD).** Many broadcasts or software played on TVs produce a so-called "letterboxed" picture. Black bars appear above and below the picture. Due to bad standardisation of the aspect ratio, e.g. the size of the black bars, there is a need to actively analyse the picture and determine of the picture is in letterbox format and what the size of the black bars is. Black bars are detected by determining if a defined number of pixels (analysed within a programmable window located in active video) are black. The output of the BBD is the first non-black line and the last non-black line.
- **Black Level Detection (BLD).** The BLD determines within a programmable (measurement) window the "black level" of a picture. The BLD will be used for the BS, but if required, it can also be used for the BBD. The BLD function records in multiple small windows within the measurement window the maximum luminance. The minimum luminance level of the various recorded maximum luminance levels is the true black level. By measuring the maximum luminance level in a small window, the BLD is not sensitive to "black" spikes.
- **Noise Estimation (NEST).** The NEST block analyses the video and outputs a number correlating to the amount of noise in the picture. A basic problem is that picture detail is also 'recognised' as noise. Several control- and status-

registers are added to compensate this. The video signal is only analysed when it is within a programmable (measurement) window. This window coincides with a rectangular shaped part of the (visible) picture. Normally this is the centre part of the picture.

Memory Based Features (MBF)

The Memory Based Features (MBF) block embodies a set of functions that require (shared) memory.
The main and sub video streams can be spatially compressed in order to produce a mixed output in the form of several PIP combinations or DW.
The main video stream can be passed through a temporal noise reduction circuit (DNR).
The 3D Comb filter is also implemented in this block.
The main and sub streams are merged when reading from memory. The merged video stream can be up-converted to either a double line rate (progressive scan) or to a double field rate (100 Hz). The up-conversion is done by means of a digital scan function. Following figure shows the functional block diagram of the video memory based features (MBF).

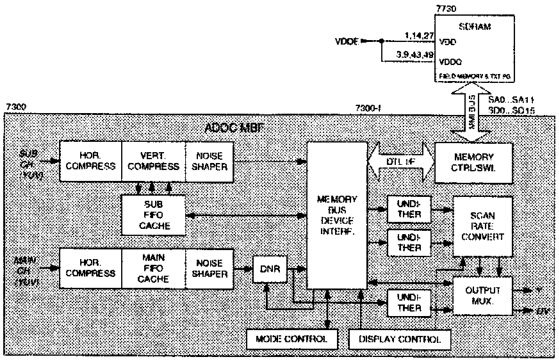
7730
SDRAM
VDDE
1,14,27
VDD
3,9,43,49
VDDQ
FIELD MEMORY & TXT PG
7300
7300-I
SMI BUS
SA0...SA11
SD0...SD15
ADOC MBF
SUB CH (YUV)
HOR. COMPRESS
VERT. COMPRESS
NOISE SHAPER
SUB FIFO CACHE
MAIN CH (YUV)
HOR. COMPRESS
MAIN FIFO CACHE
NOISE SHAPER
DNR
MEMORY BUS DEVICE INTERF.
DTL I/F
MEMORY CTRL/SWI.
UNDI-THER
UNDI-THER
UNDI-THER
SCAN RATE CONVERT
OUTPUT MUX.
Y
UV
MODE CONTROL
DISPLAY CONTROL

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Figure 9-12 MBF block diagram

Back End Features (BEF)

The Back End Features (BEF) block embodies a collection of spatial picture enhancement functions.
The video display has to be blanked during AV switching, channel switching, V-chip, and Child Lock modes. This is done inside the BEF block of the ADOC IC. The fast blanking signal input from SCART1and SCART3 (TV SCART inputs) for RGB video insertion is connected to the ADOC IC.

Sharpness functions are:

- Luminance Transient Improvement (LTI),
- Dynamic Peaking, and
- Digital Colour Transient Improvement (DCTI).

The panorama block does the non-linear scaling for displaying 4:3 formats on a wide-screen display.

Colour enhancement functions are:

- Skin Tone Control,
- Blue Stretch, and
- Green Enhancement.

A colour Space Converter can convert the video signal from YUV to RGB format. The Frame Processing block can insert frames and borders such as a coloured frame around the Picture in Picture (PIP). Following figure shows the structure of the Back End Feature block.

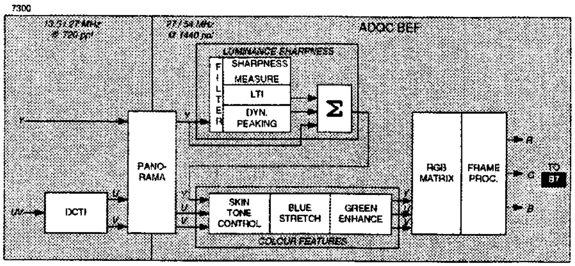
7300
13.5 / 27 MHz
@ 720 ppl
27 / 54 MHz
@ 1440 ppl
ADOC BEF
LUMINANCE SHARPNESS
FILTER
SHARPNESS MEASURE
LTI
DYN. PEAKING
Σ
Y
UV
DCTI
U
V
PANO-RAMA
SKIN TONE CONTROL
BLUE STRETCH
GREEN ENHANCE
COLOUR FEATURES
RGB MATRIX
FRAME PROC.
R
G
B
TO B7

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Figure 9-13 BEF block diagram

Digital Output Processor (DOP)

The DOP is a display processor block, and contains the following functions:

- **RGB control processor** with linear RGB input for the main video signal, a linear RGB input for OSD/text signals with blending, and an RGB output stage with black current stabilisation which is realised with the continuous cathode calibration (2-point black current measurement) system.
- **Programmable deflection processor**, driven by an external crystal clock, which generates the drive signals for the horizontal, east-west, north-south and vertical deflection with extensive geometry correction capabilities.
- The circuit can be used in both single scan (50 or 60 Hz) and double scan (100 or 120 Hz) applications.

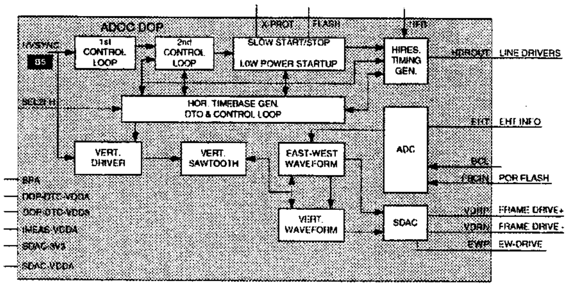
ADOC DOP
X-PROT
FLASH
HFB
H/VSYNC
B5
1st CONTROL LOOP
2nd CONTROL LOOP
SLOW START/STOP
LOW POWER STARTUP
HIRES. TIMING GEN.
HDRIOUT
LINE DRIVERS
HOR. TIMEBASE GEN. DTO & CONTROL LOOP
ADC
EHT
EHT INFO
BCL
POR FLASH
VERT. DRIVER
VERT. SAWTOOTH
EAST-WEST WAVEFORM
VERT. WAVEFORM
SDAC
VDRP
FRAME DRIVE+
VDRN
FRAME DRIVE-
EWP
EW-DRIVE
SDAC-VDDA

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Figure 9-14 DOP block diagram

RGB Control Processing

- The RGB control circuit of the DOP contains two sets of input signals:
  - The first RGB input (RGB), 10 bits wide, is intended for the normal video signals coming from the BEF part. The "RGB" signals will first enter a contrast control stage, followed by a brightness control stage, both influenced by a combination of user control, Beam Current Limiter and Peak White Limiter, followed by a soft clipper stage. Then the signal will be applied to the blender stage. The blender input signal will be used as an input for the peak white limiting system.
  - The second RGB input (GFX), 4 bits wide, is intended for OSD and Teletext signals. The switching between the internal signal and the OSD signal is realised via a blending function. The "GFX" input signals will be re-formatted to 10 bit wide internally before entering the Beam Current Control brightness correction stage, followed by the hard clip stage. Then the signal will also be applied to the blender stage.
- The two input data streams are combined into one stream by the blender. This blender is controlled by a third data stream.
- The next block is the "Drive Adjust" part. It contains a Picture Tube Biasing system, a Beam Current Control, and Peak White Limiting part.

In order to enhance the spatial bandwidth of the CRT display, Scan Velocity Modulation (SCAVEM) is implemented on the CRT-panel.

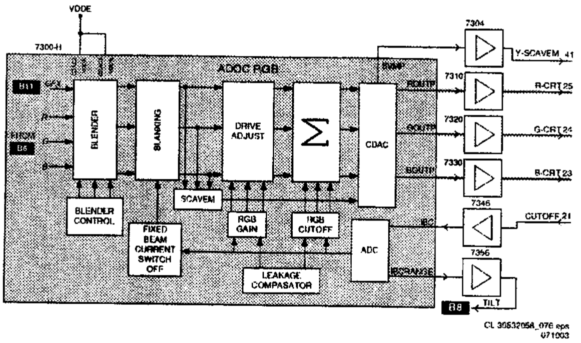

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Figure 9-15 ADOC RGB control block diagram

Synchronisation and Deflection Processing

- **Horizontal synchronisation and drive circuit.** The horizontal drive signal is obtained from an internal oscillator, which runs at a fixed frequency of 54 MHz. This oscillator is synchronised to the incoming horizontal H_D pulse by means of a digital PLL. The horizontal drive signal is generated by a second control loop, which compares the phase of the reference signal, applied from the internal DTO, to the horizontal flyback pulse HFB.
- **Vertical deflection and drive circuit.** The drive signals for the vertical and E/W deflection circuits are generated by a vertical divider, which derives its reference signal from the Horizontal Time base Generator. This divider is synchronised by the incoming V_D pulse, generated by the input processor or the Feature Box. The vertical drive output is realised by a differential voltage, which is generated by SDACs. The outputs must be DC-coupled to the vertical output stage (TDA8177, item 7620 on the LSP).

See also figure "DOP block diagram"

9.5 Synchronisation

9.5.1 Sync Flow

The CVBS signal on the SCART1 connector (CVBS-SC1_AV1-IN system signal path; designated as EXT 1 CVBS) is used to provide synchronisation for the EXT1 RGB input. Besides providing synchronisation for RGB source, EXT1 CVBS is also required for SCART2 CVBS output.

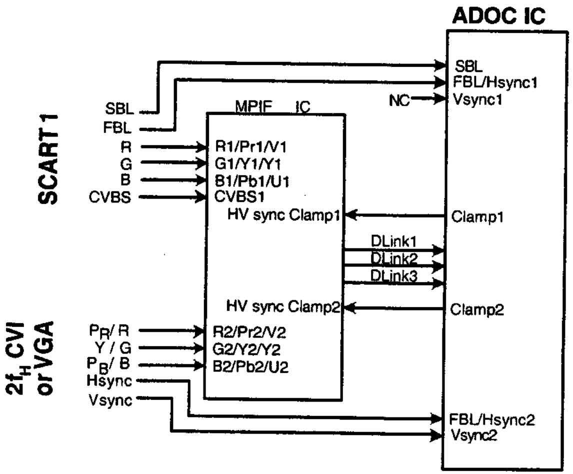

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Figure 9-16 Sync flow block diagram

For 1fH CVI input, synchronisation is derived from sync-on-Y. For the 2fH CVI input, synchronisation signal is derived from sync-on-Y input or the H_SYNC/V_SYNC.
In case of VGA input, synchronisation signal is taken from H_SYNC and V_SYNC inputs

9.6 Audio

9.6.1 Introduction

Sound IF processing, audio source selection, and audio analogue-digital signal conversions are done in the MPIF IC. SIF demodulation, sound system auto-detection, audio base-band, and headphone processing is done in the ADOC IC. Therefore, the ADOC contains a digital TV sound processor for analogue and digital multi-channel sound systems in TV sets. By hardware programming, several applications can be scaled.

The sound processing of the SALSA system can be split into three parts:

- Initial source selection and analogue to digital conversion performed by MPIF.
- Demodulator and Decoder (DEMDEC) performed by the ADOC.
- Back End Features (BEF) performed by the ADOC.

9.6.2 MPIF Sound part

The (main) Tuner receives an RF signal and converts it to IF. Via the appropriate SAW filters, the SIF signal is delivered to the QSS mixer stage of the MPIF IC and if channels according to standard L/L' are received also to the AM demodulator. The Quasi Split Sound demodulation generates the SSIF or intercarrier signal. By the SSIF switch, it is possible to choose between the internally derived intercarrier and an external second SIF (e.g. from a PIP front end or 10.7 MHz radio). The selected SSIF passes some anti-alias filtering, is amplified in an AGC amplifier and is then converted from analogue to digital (SSIF AGC/ADC). Together with other signals, the digitised SSIF is transferred via an I2D-Link to the ADOC IC.
The audio signal out of the AM demodulator is connected to the analogue X-bar in the MPIF IC. All other inputs to this multiplexer/audio switch come from external, either from the PIP front end (AMEXT/PIPMONO) or SCART/CINCH (AUDxin) or the DAC1, DAC2 output signals from ADOC. The audio AD converters are digitising the audio signals foreseen for further digital processing in ADOC. Three stereo outputs (AUDx out, LINE out) are available for connections to SCART/CINCH sockets.
The sound part of ADOC consists of the demodulator/decoder (DEMDEC), sample rate conversion (SRC), a digital input X-bar, the digital audio processing for the loudspeaker, headphone and DAC channels, the I2S processing and interfacing as well as the DA conversion. This part will be described in the next chapter.

9.6.3 ADOC Sound part

Introduction
The ADOC sound part contains two DSP cores as shown in the block diagram. The first core called DEMDEC-DSP is combined with DEMDEC (Demodulation/Decoding) hardware and the second core is the AUDIO-DSP. The DEMDEC-DSP is used for the decoder and demodulator tasks, plus the sample rate conversion.
The AUDIO-DSP is used for the sound features, from the level adjust unit up to the output cross bar. Audio DACs and I2S hardware (optional) are converting the processed signals to analogue or digital audio.

All I2D data links carry sound signals. The data link processing splits them from the other signals as video so that the DEMDEC block receives the second sound IF (SSIF) and the audio

signals from the audio ADCs of the MPIF IC. The SSIF needs some hardware processing before it enters the DEMDEC DSP. The DEMDEC processing will be described in the next chapter. The audio signals from the audio ADCs of the MPIF are passing the DEMDEC DSP only for source selection and sample rate conversion.
In this chassis, two of the DAC **outputs** are used to feed a headphone. Two other DAC stereo outputs are provided for the audio feedback to the MPIF IC. They are located to pins of the ADOC that suit best for connection to MPIF.

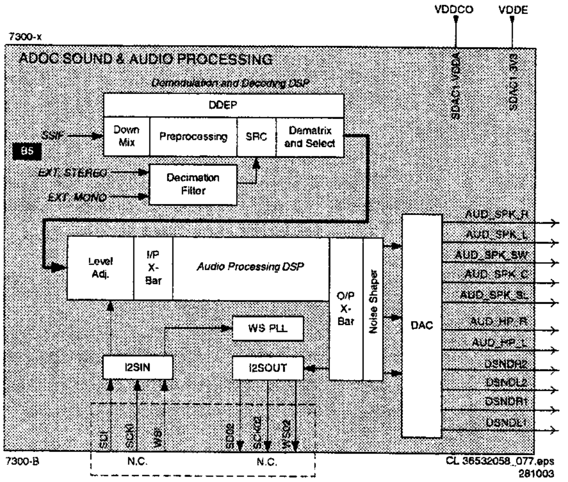

Figure 9-17 ADOC sound processing block diagram

DEMDEC DSP

The output signals of the above-mentioned hardware blocks, plus four audio ADC channels are read in by the DEMDEC DSP, processed, converted to the current audio sample rate, “demultiplexed”, and forwarded to the Audio DSP for further processing (volume, tone control, effects etc.).

Down Mixer

The digitised SSIF input signal is fed to the mixers, which mix one or both input sound carriers down to zero IF.

Pre-processing

This part contains the sound system identification and demodulation circuitry.

Audio Sample Rate Conversion (SRC)

All input signals pass through a sample rate conversion to the actual output sample rate (usually 48 kHz) such that the output rate does not need to be synchronised with any of the input rates. Up to five separate channels can be converted.

Audio Processing DSP

This block applies several filters, like down-sampling and de-emphasis, noise reduction processing, performs a sample rate conversion (SRC) to the current audio sample rate, and routes the decoded signals to the output channels.
The generic processing controls are Volume, Bass, Treble, Balance, Incredible Surround, Spatial (incredible mono), DBE, Dynamic Ultra Bass II (for non-woofer sets only), AVL, Sub-Woofer, and 5-band Graphic equaliser.
The Headphone volume can be separately controlled in the Headphone menu without affecting the master volume (the setting of the volume tables will be adapted after fine tuning).
For variable volume output for USA, the DAC1 output will switch to the Main channel and therefore the same volume curve for the Main Channel can be used.

9.6.4 Audio Amplifier

Speakers (diagram A6)

The audio output stage is built around IC7701 , which is a balanced amplifier, and is located on the LSP. It uses an monolithic integrated power amplifier IC, the TDA7497. The gain of the amplifier is constant. This means that volume control is done via the ADOC.
The supply voltage is +28 V, generated by the power supply via L5506 (or L5512). The TDA7497 delivers an output of 3 x 10 W_rms to two full range speakers and an (optional) subwoofer.

Muting

There are three types of muting available: system mute, headphone status mute, and user mute.

- **System mute.** System muting is implemented for “special events” such as channel/source change event, loss of identification signal, "on/off" switching of the set, during search and auto store/program, and/or sound mode change. This muting is transparent to the user. Audio output is muted before the above “special events” occurred, to prevent problems such as audible plop. Muting is done via the SOUND-ENABLE (software controlled) and/or POR (hardware controlled) line connected (via TS7710 and 7711) to pin 10 of the amplifier-IC and coming from the ADOC microprocessor.
- **Headphone status mute.** A headphone status is available to detect the presence of the headphone and mute the main speakers if the headphone is detected. The microprocessor will read the FRONT-DETECT status.
- **User mute.** This is a mute option available to the user. The user select the MUTE option on the remote control to switch "off/on" the sound output to the main loudspeaker and the (optional) subwoofer.

Headphone amplifier (diagram A7)

The headphone amplifier is built around IC7751 (NJM4556), which is a high-gain, high output current dual operational amplifier. The supply voltage is +5 V.

9.7 Control

9.7.1 Introduction

The MIPS processor within the ADOC performs the control of the complete SALSA system. This part of the document will examine the functions that enable the MIPS to operate and control the remainder of the SALSA system.

Some control features:

- MIPS1910 processor (MIPS).
- Embedded SRAM.
- External Bus Interface Unit (EBIU) for external memory access.
- SDRAM Interface.
- Interrupt Controller.
- Power and Clock management.
- General Purpose I/O (GPIO).
- Analogue to Digital conversion.
- Two x I2C master/slave.
- Two x General Purpose Timers.
- UART.
- Two x Multi-standard VBI Data Capture Unit.
- EJTAG (for debug and boundary scan functions).
- Remote Control (Infra Red) pre-processing.
- Graphics.

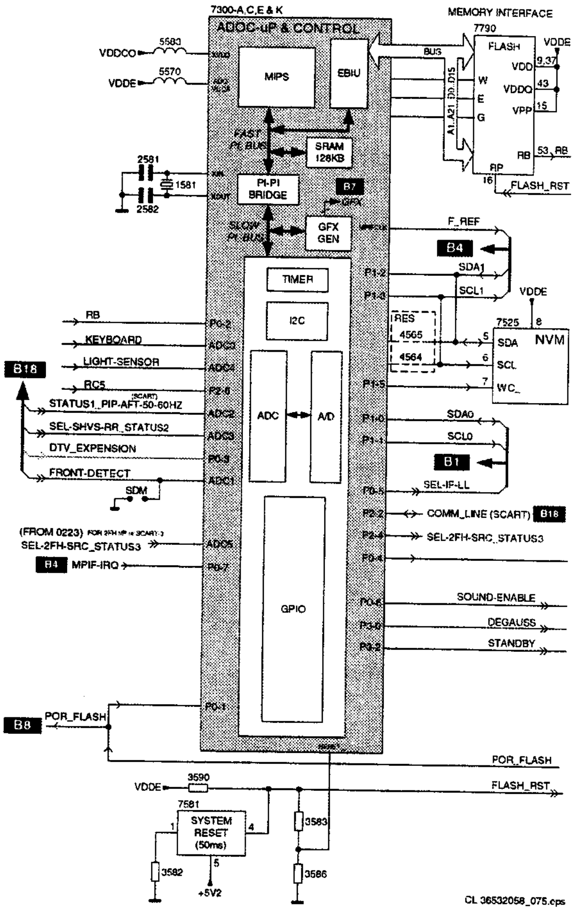
7300-A,C,E & K
ADOC-uP & CONTROL
MEMORY INTERFACE
7790
FLASH
VDDE
VDD
VDDQ
VPP
9,37
43
15
W
E
G
A1..A21
D0..D15
BUS
RB
53 RB
RP
16
FLASH_RST
VDDCO
5583
VDDE
5570
MIPS
EBIU
FAST PI BUS
SRAM 128KB
2581
1581
2582
PI-PI BRIDGE
B7
GFX
SLOW PI BUS
GFX GEN
F_REF
B4
SDA1
SCL1
VDDE
TIMER
I2C
RES
4565
4564
7525
8
NVM
SDA
SCL
WC_
5
6
7
P1-2
P1-3
P1-5
RB
KEYBOARD
LIGHT-SENSOR
RC5
B18
(SCART)
STATUS1_PIP-AFT-50-60HZ
SEL-SHVS-RR_STATUS2
DTV_EXPENSION
FRONT-DETECT
SDM
P0-2
ADC3
ADC4
P2-6
ADC2
ADC3
P0-3
ADC1
ADC
A/D
P1-0
P1-1
SDA0
SCL0
B1
P0-5
SEL-IF-LL
P2-2
COMM_LINE (SCART)
B18
P2-4
SEL-2FH-SRC_STATUS3
P0-4
(FROM 0223)
SEL-2FH-SRC_STATUS3
ADC5
B4
MPIF-IRQ
P0-7
GPIO
P0-6
SOUND-ENABLE
P3-0
DEGAUSS
P3-2
STANDBY
P0-1
B8
POR_FLASH
POR_FLASH
FLASH_RST
VDDE
3590
7581
SYSTEM RESET (50ms)
1
4
5
3583
3582
3586
+5V2

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Figure 9-18 ADOC control block diagram

9.7.2 Internal Bus Structure

PI Bus

The Peripheral Interconnect (PI) bus connects all of the functional blocks within the ADOC device. Physically it is split into four distinct sections. These are referred to as:

- Fast PI Bus.
- Slow PI Bus.
- Video PI Bus.
- Sound PI Bus.

The individual segments of the PI bus are interconnected via PI-PI bridges. When several devices are connected to a bus system section only one of these may have control (ownership) of the bus section at any instant in time. The device that has control is referred to as the bus master, the remaining devices are referred to as slaves. Each bus segment section has a Bus Control Unit (BCU), which allocates bus ownership to the various modules that are capable of being bus masters. A bus master may have ownership of one or more sections of the PI bus.

Extension Bus Interface Unit

The Extension Bus Interface Unit (EBIU) allows various types of memory (ROM/FLASH/SRAM) to be attached to the ADOC IC and must therefore be configured per memory type (in terms of chip select lines, bus width used, and access times). This enables the hardware of the EBIU to correctly address the external memories and apply the correct number of wait states.

9.7.3 Microprocessor Reset

The reset of the device is split between three functions:

- Power-On-Reset (POR). Output is fed to the Power Clock Reset (PCR) block generating a Hard reset (all functions reset).
- PCR. In simplified terms two outputs are available:
  - Hard reset, all blocks within ADOC are reset.
  - Soft reset, a limited number of blocks within the control core are reset.
- GP registers are used to allow software control of the reset to certain blocks within ADOC.

9.7.4 External Bus Structure

I2C Bus

The system has two system I2C buses; one for the devices on the SSB and the other for the devices used in the external modules .

- The **I2C-1** system bus, comprises of SCL and SDA, is used to control all the I2C devices on the LSP (the main tuner) and other I2C devices connected to other external panels (PIP Front-End demodulation IC, PIP tuner, etc.). The I2C-1 is a 100 kHz bus and is called as "slow" bus. It is connected to the +5V supply. All these devices are powered down in the Standby mode.
- The **I2C-2** system bus, comprises of SCL2 and SDA2, is used to control all the I2C devices (MPIF, 3D-Comb, NVM, etc.) present on the SSB. The I2C-2 is a 400 kHz bus and is called as "fast" bus. It is connected to the +3.3V supply.

9.8 Protections

For a detailed description, see chapter 5 "Service Modes, Error Codes, and Fault Finding".

9.9 Software Upgrading

In this chassis, you can **upgrade** the software via ComPair. This offers the possibility, to replace the entire SW image without having to remove the flash-RAM from its socket. You can find more information on how this procedure works in the ComPair file. It is possible that not all sets are equipped with the hardware, needed to make software upgrading possible. To speed up the programming process, the firmware of the ComPair interface can be upgraded. See Chapter "Service Modes ..."; paragraph "ComPair" - "How To Order" for the order number.

9.10 Abbreviation list

Table 9-1 Abbreviations

Abbreviation	Description
0/6/12	SCART switch control signal on A/V board. 0 = loop through (AUX to TV), 6 = play 16:9 format, 12 = play 4:3 format
2CS	2 Carrier Stereo
A2	Commonly known as two carriers sound (2CS) system
AC (or ac)	Alternating Current
ACI	Automatic Channel Installation: algorithm that installs TV channels directly from a cable network by means of a predefined TXT page
ADC	Analogue to Digital Converter
ADOC	Analogue Digital One Chip
AFC	Automatic Frequency Control: control signal used to tune to the correct frequency
AGC	Automatic gain control (feedback) signal to the tuner.
AM	Amplitude Modulation
ANR	Automatic Noise Reduction: one of the algorithms of Auto TV
AP / A/P	Asia Pacific
AR	Aspect Ratio: 4 by 3 or 16 by 9
ASD	Automatic Standard Detection
AV	External Audio Video
AVL	Automatic Volume Level control
B	Blue
B/G	Monochrome TV system. Sound carrier distance is 5.5 MHz
BBD	Black Bar Detection
BCL	Beam Current Limiter
BC-PROT	PROTection signal to the microprocessor for a too high Beam Current.
BG	System B and G
BLC-INFO	BLack Current INFO
BLD	Black Level Detection
BS	Black Stretch
BTSC	Broadcast Television Standard Committee. Multiplex FM stereo sound system, originating from the USA and used e.g. in LATAM and AP-NTSC countries
C	Chroma (video) / Centre channel (audio)
CL	Constant Level: audio output to connect with an external amplifier
CLUT	Colour Look Up Table
ComPair	Computer aided rePair
CRT	Cathode Ray Tube or picture tube
CSM	Customer Service Mode
CTI	Colour Transient Improvement: manipulates steepness of chroma transients
CVBS	Composite Video Blanking and Synchronization
CVI	Component Video Input
D/K	Monochrome TV system. Sound carrier distance is 6.5 MHz
DAC	Digital to Analogue Converter
DBE	Dynamic Bass Enhancement: extra low frequency amplification
DC (or dc)	Direct Current
DCC	Dynamic Contrast Control
DC-filament	Filament supply voltage
DEGAUSS	Control line. Logic LOW to enable CRT degaussing. Logic HIGH to disable the CRT degaussing.
DFU	Directions For Use: owner's manual
DNR	Digital Noise Reduction: noise reduction feature of the set
DOP	Digital Output Processor (Part of ADOC which takes care of RGB control and delection)
DPL	Dolby Pro Logic
DRAM	Dynamic RAM
DS	Digital Scan
DSP	Digital Signal Processing
DST	Dealer Service Tool: special remote control designed for dealers to enter e.g. service mode (a DST-emulator is available in ComPair)
DTS	Digital Theatre Sound
DVD	Digital Versatile Disc
DVI(-d)	Digital Visual Interface (d= digital only)
DW	Double Window
DYN-FASE-COR	Dynamic phase correction, to correct the phase of the H-drive
EEPROM	Electrically Erasable and Programmable Read Only Memory
EHT	Extra High Tension
EHT-INFO	Extra High Tension INFOrmation, used for contrast reduction, vertical and horizontal amplitude correction, beam current protection, and flash detection
EMI	Electro Magnetic Interference
EPG	Electronic Program Guide: system used by broadcasters to transmit TV guide information (= NexTView)
EPLD	Erasable Programmable Logic Device
EU	Europe
EW	East West, related to horizontal deflection of the set
EW-DRIVE	East -West correction drive signal.
EXT	EXTernal (source), entering the set by SCART or by Cinches (jacks)
FBL	Fast BLanking: DC signal accompanying RGB signals
FBX	Feature Box: module which contains 100 Hz processing, Pixel Plus, and AutoTV algorithms (FBX6= based on PICNIC, FBX7= based on PICNIC and Eagle)
FE	Front End
Field	Each interlaced broadcast FRAME is composed of two Fields, each Field consists of either Odd or Even lines
FILAMENT	Filament of CRT
FLASH	FLASH memory
FM	Field Memory / Frequency Modulation
FM Radio	Audio receiver which can receive the FM Band 87.5 - 108 MHz
FMR	FM Radio
Frame	A complete TV picture comprising of all lines (625/525)
FRAMEDRIVE -	Differential frame (vertical) drive signal (negative)
FRAMEDRIVE+	Differential frame (vertical) drive signal (positive)
FRC	Frame Rate Converter
FRONT-DETECT	Control line for detection of headphone insertion, Service Mode jumper, power failure detection.
FRONT-Y_CVBS	Front input luminance or CVBS (SVHS)
G	Green
Gb/s	Giga bits per second
H	H_sync to the module
H_2FH	Horizontal sync input for the 2fH source.
H_A50	Horizontal Acquisition 1fH: horizontal sync pulse coming out of the HIP
H_D100	Horizontal Drive 2fH: horizontal sync pulse coming out of the feature-box
H_DRIVE	Horizontal Drive
H_FLYBACK	Horizontal Flayback
H_OUT	H_sync output of the module
H_OUT	Horizontal Output pulse
HA	Horizontal Acquisition: horizontal sync pulse coming out of the BOCMA
HD	High Definition
HEADPHONE-L	Stereo headphone (Left) signal output.
HEADPHONE-R	Stereo headphone (Right) signal output.
HFB	Horizontal Flyback Pulse: horizontal sync pulse from large signal deflection
HP	HeadPhone
HW	Hardware
I	Monochrome TV system. Sound carrier distance is 6.0 MHz
I2C	Integrated IC bus (same as IIC)
I2S	Integrated IC Sound bus
IC	Integrated Circuit
IDRIVE-	Vertical drive -
IDRIVE+	Vertical drive +
IF	Intermediate Frequency
IF-TER	IF signal from main tuner
IIC	Integrated IC bus (same as I2C)
Interlaced	Scan mode where two fields are used to form one frame. Each field contains half the number of the total amount of lines. The fields are written in "pairs", causing line flicker.
IO	In/Out
IR	Infra Red
IROM	Internal ROM (inside uP)
IRQ	Interrupt ReQuest
ITV	Institutional TV
JTAG	Joint Test Action Group. Definition for a standardised serial test interface
KEYB	Front panel keyboard
KEYBOARD	Input line: carries the voltage value of the corresponding tact switch on TOP-control or FRONT-control keypad
L	Left audio channel

Abbreviation	Description
L/L'	Monochrome TV system. Sound carrier distance is 6.5 MHz. L' is Band I, L is all bands except for Band I
Last Status	The settings last chosen by the customer and read and stored in RAM or in the NVM. They are called at startup of the set to configure it according to the customer's preferences
LATAM	Latin America
LCD	Liquid Crystal Display
L-CL_VLOUT	REAR CINCH stereo output
LED	Light Emitting Diode
LFE	Low Frequency Enhancement audio channel
L-FRONT-IN	EXT3 stereo input
LIGHT-SENSOR	Ambient light intensity signal.
LINE DRIVE	Line drive signal (for the Line transistor)
LINEDRIVE1	Horizontal (line) deflection drive signal.
LNA	Low Noise Adapter / Low Noise Amplifier
LOT	Line Output Transformer
LPD	LG.Philips Displays
LS	Loudspeaker
Ls, Rs	Left surround and Right surround channel (audio)
LSP	Large signal panel
Lt, Rt	Left total and Right total in case of a Dolby ProLogic encoded signal (audio)
LTI	Luminance Transient Improvement
LTP	Luminance Transient Processor
LUT	Look Up Table
LVDS	Low Voltage Differential Signalling, data transmission system for high speed and low EMI communication.
M/N	Monochrome TV system. Sound carrier distance is 4.5 MHz
Mb/s	Mega bits per second
MCS	Multi Channel Sound: refers to Dolby Pro Logic Surround in A02 ADOC
MDO	Mode control data output
MIPS	Microprocessor without Interlocked Pipeline-Stages. A RISC-based microprocessor.
Mips	Million instructions per second
MMI	Multi Media Interface
MOSFET	Metal Oxide Semiconductor Field Effect Transistor
MPEG	Motion Pictures Experts Group
MPIF	Multi Platform InterFace (Part of Salsa chipset, sister-chip of ADOC IC)
MPIP	Multi Picture in Picture: commercial feature showing several frozen or moving pips
MPX	MultiPleX
MSP	Multi-standard Sound Processor: ITT sound decoder
MUTE	MUTE Line
NAFTA	North American Free Trade Area (NAFTA & USA are used interchangeable)
NC	Not Connected
NDF	No vertical Deflection: vertical fly back protection
NHF	No Horizontal deflection: horizontal fly back protection
NICAM	Near Instantaneously Companded Audio Multiplexing. This is a digital sound system, mainly used in Europe.
NTC	Negative Temperature Coefficient, non-linear resistor
NTSC	National Television Standard Committee. Colour system mainly used in North America and Japan. Colour carrier NTSC M/N= 3.579545 MHz, NTSC 4.43= 4.433619 MHz (this is a VCR norm, it is not transmitted off-air)
NVM	Non Volatile Memory: IC containing data such as alignments, stations
O/C	Open Circuit
OB	Option Byte
OC	Open Circuit
ON/OFF LED	On/Off control signal for the LED
ON/STBY	On/Standby
ON-OFF-LED	Active-LOW control line. Logic LOW = red LED on, HIGH = red LED off.
OP	Option Byte
OSD	On Screen Display
P50	Project 50: communication protocol between TV and peripherals
PAL	Phase Alternating Line. Colour system mainly used in West Europe (colour carrier= 4.433619 MHz) and South America (colour carrier PAL M= 3.575612 MHz and PAL N= 3.582056 MHz)
PC	Personal Computer
PCB	Printed Circuit Board (same as "PWB")
PCM	Pulse Code Modulation
PILOT	Pilot Signal
PIP	Picture In Picture
PLL	Phase Locked Loop. Used for e.g. FST tuning systems. The customer can give directly the desired frequency
POR	Power On Reset, signal to reset the microprocessor
POR_FLASH	Signal that informs the micro controller (painter) that set will switch off
Progressive Scan	Scan mode where all scan lines are displayed in one frame at the same time, creating a double vertical resolution.
PTC	Positive Temperature Coefficient, non linear resistor
PTP	Picture Tube Panel
PWB	Printed Wiring Board (same as "PCB")
PWM	Pulse Width Modulation
QSS	Quasi Split Sound
R	Right audio channel
R	Red
RAM	Random Access Memory
RC	Remote Control transmitter
RC5	Remote Control system 5, the signal from the remote control
RC5 / RC6	Signal protocol from the remote control receiver
RDS	Radio Data System
RESET	RESET signal
RF	Real Flat / Radio Frequency
RGB	Red, Green, and Blue. The primary colour signals for TV. By mixing levels of R,G, and B, all colours (Y/C) are reproduced.
RGBHV	Red, Green, Blue, Horizontal sync, and Vertical sync
RISC	Reduced Instructions Set Computer
RMS	Root Mean Square value
ROM	Read Only Memory
S	Surround channel or mono surround channel (audio)
S/C	Short Circuit
S/PDIF	Sony Philips Digital InterFace
SALSA	System Application for Low Segment of Analogue TV
SAM	Service Alignment Mode
SAP	Second Audio Program
SAW	Surface Acoustics Wave
SC	SandCastle: two-level pulse derived from sync signals / SCART
SCART	Syndicat des Constructeurs d'Appareils Radiorecepteurs et Televisieurs
SCAVEM	Scan Velocity Modulation
SCL	Serial Clock I2C
SCL-F	CLock Signal on Fast I2C bus
SD	Standard Definition
SDA	Serial Data I2C
SDA-F	Data Signal on Fast I2C bus
SDAM	Service Default / Alignment Mode
SDRAM	Synchronous DRAM
SECAM	SEequence Couleur Avec Memoire: Colour system mainly used in France and East Europe. Colour carriers= 4.406250 MHz and 4.250000 MHz
SEL	Control signal
SIF	Sound Intermediate Frequency
SIMM	Single In-line Memory Module: 80-fold connector between LSP and SSB
SL	Audio Surround Left
SLDP	Smart Local Dooming Prevention (HW and SW)
SMC	Surface Mounted Components
SMPS	Switched Mode Power Supply
SND	SouND
SNERT	Synchronous No parity Eight bit Reception and Transmit
SOG	Sync On Green
SOPS	Self Oscillating Power Supply
SOUND-ENABLE	Control line to do hardware mute or un-mute of loudspeakers.
SR	Audio Surround Right
SRAM	Static RAM
SS	Small Screen
ST_BY	Standby
STANDBY (POR)	Signal coming from Main Supply informing the supply is switching off
STATUS	Status signal from pin 8 on SCART connector
STBY	Standby
SURR	Surround (mono) signal
SVHS	Super Video Home System
SW	Software / Subwoofer
SW1	Switch 1
TBD	To Be Defined

Abbreviation	Description
THD	Total Harmonic Distortion
TILT	PWM Output signal (variable DC level) to control the picture tilt from the DOP block of the ADOC.
Trinorma	Video standard, combination of PAL N, PAL M, NTSC M
TXT	Teletext
TXTSW	Teletext switch
U_100	U from Feature Box
UART	Universal Asynchronous Receiver Transmitter
UBE	Ultra Bass Enhancement
uC	Micro controller
UI	User Interface
UOC	Ultimate One Chip
uP	Microprocessor
UV	Colour difference signals
V	V_sync
V_100	V from Feature Box
V_2FH	Vertical sync input for the 2fH source.
V_A50	Vertical Acquisition 1fH
V_AMP	Vertical Amplitude DAC output
V_BAT	Main supply for deflection (usually 141 V)
V_D100	Vertical Drive 2fH: vertical sync pulse from deflection
V_DNEG	One of the symmetrical drive signals for the DC frame output stage.
V_DPOS	One of the symmetrical drive signals for the DC frame output stage.
V_OSD	Vertical OSD
VA	Vertical Acquisition
VBI	Vertical Blank Interval
V-chip	Violence chip
VCR	Video Cassette Recorder
VD	Vertical Drive: vertical sync pulse coming from the feature box
VDS	Virtual Dolby Surround
VERT	Vertical Output pulse
VESA	Video Electronics Standards Association
VGA	Video Graphics Array: 640x480 (4:3)
VGND	Video ground
VGUARD	Vertical guard voltage
VIF	Video Intermediate Frequency
VL	Variable Level out: processed audio output toward external amplifier
VMEM	Voltage supplied for EEPROM
VMICRO	Power supply for micro controller
VOL	Volume
VSYNC	Pulse derived of 530 s-circuit behind the HOP, to vertically synchronize the Painter
WD	Watch Dog
WE-NVM	NVM write enable control line.
WS	Wide Screen
WSS	Wide Screen Signaling, used by broadcasters to transmit e.g. PALPLUS and Aspect Ratio
WST	World System Teletext
WXGA	1280x768 (15:9)
WYSIWYR	What You See is What You Record: record selection that follows main picture and sound
XGA	Extended Graphics Array: 1024x768 (4:3)
XTAL	Quartz crystal
Y	Luminance signal
YC (or Y/C)	Luminance (Y) and Chrominance (C) signal (analogue video encoding format)
YPbPr	Component video (Y= Luminance, Pb/ Pr= Colour difference signals)
YUV	Component video

9.11 IC Data Sheets

This section shows the internal block diagrams and pin layouts of ICs that are drawn as "black boxes" in the electrical diagrams (with the exception of "memory" and "logic" ICs). This is not applicable to this manual.

10. Spare Parts List

Large Signal Panel [A]

Various

0080	4822 492 70789	Transistor clamp
0136	3104 301 24181	Spring for Bracket
0137	3104 301 24181	Spring for Bracket
0138	4822 255 41371	Transistor clamp
0139	4822 492 62076	Transistor clamp
0261	3104 304 10661	Cable clamp
0262	3104 304 10722	Cable clamp
0320	4822 255 41371	Transistor clamp
0341	4822 492 70788	IC clamp
0389	4822 492 70789	Transistor clamp
0395	4822 492 70789	Transistor clamp
0396	4822 492 70789	Transistor clamp
1205	2422 025 17242	Connector 80p f
1417	4822 265 20723	Connector 2p m
1424	2422 025 11244	Connector 7p m
1491	4822 267 10973	Connector 1p m
1498	2422 025 04849	Connector 2p m
1499	2422 025 04849	Connector 2p m
1501	4822 070 35002	Fuse 5A
1502	4822 267 10774	Connector 2p m Rd
1503	4822 070 12502	Fuse 2.5A
1505	2422 025 16374	Connector 2p m
1511	4822 265 11253	Fuse holder 2p
1512	4822 265 11253	Fuse holder 2p
1550	2422 132 07411	Relay 1p 5V 5A
1590	4822 252 60151	Sparkgap dsp501
1591	4822 252 60151	Sparkgap dsp501
1601	2422 086 10919	Fuse 65V 125mA
1620	4822 267 10735	Connector 3p m
1625	2422 025 16382	Connector 3p m
1735	4822 267 10565	Connector 4p
1901	4822 267 10771	Socket 2 x SCART
1902	4822 267 10982	Connector 2p
1936	2422 025 12485	Connector 11p m
1940	2422 025 12485	Connector 11p m
1943	4822 267 10748	Connector 3p m
1945	4822 267 10735	Connector 3p m
1947	4822 267 10734	Connector 5p m
8000	3104 311 03272	Cable 640mm EHT
8193	4822 320 20216	Focus cable 364 mm
8194	4822 320 20189	Cable HT-focus 44cm Rd
8417	3104 311 04561	Cable 2p3/400/2p3
8424	3104 311 02991	Cable 7p/560/7p Wh
8625	3104 311 03101	Cable 3p/560/3p Bk
8625	3104 311 06261	Cable 2p/560/2p3 HR BK INS
8936	3104 311 04121	Cable 11p/680/11p INS
8936	4822 320 12514	Cable 11p 680mm
8940	3104 311 01161	Cable 11p/340/11p Bk
8940	4822 323 10458	Cable 11p 480mm HR WH

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2100	4822 126 13841	1nF 20% 250V
2101	4822 121 51598	2.2nF 5% 400V
2102	4822 124 40248	10µF 20% 63V
2103	2020 552 94427	100pF 5% 50v 0603
2104	4822 123 14025	2200µF 20% 16V
2105	2020 552 94427	100pF 5% 50v 0603
2107	4822 121 43855	3.3nF 5% 400V
2108	4822 121 70162	10nF 5% 400V
2109	4822 126 14472	1µF 10% 10V 0805
2110	4822 126 14472	1µF 10% 10V 0805
2111	4822 121 43526	47nF 5% 250V
2112	5322 126 11583	10nF 10% 50V 0603
2115	4822 124 40764	22µF 100 V
2116	4822 126 13682	100pF 5% 1kV
2118	4822 124 80061	1000µF 20% 25V
2119	4822 123 14025	2200µF 20% 16V
2120	4822 126 13862	1.5nF 10% 2kV
2126	4822 123 14025	2200µF 20% 16V
2130	5322 126 11583	10nF 10% 50V 0603
2131	4822 126 13881	470pF 5% 50V
2132	4822 126 10206	2.2nF 10% 500V
2140	4822 124 40248	10µF 20% 63V
2141	4822 124 40248	10µF 20% 63V
2143	4822 126 10206	2.2nF 10% 500V
2144	4822 126 14472	1µF 10% 10V 0805
2145	4822 126 13881	470pF 5% 50V
2147	3198 017 31530	15nF 20% 50V 0603
2148	4822 126 13599	3.3nF 10% 500V
2149	4822 126 14472	1µF 10% 10V 0805
2150	5322 126 11583	10nF 10% 50V 0603
2153	5322 126 11582	6.8nF 10% 63V
2154	4822 126 14549	33nF 16V 0603
2161	2020 558 90556	680pF 10%b 1kV
2161	4822 126 14152	680pF 10% 1kV
2163	2222 338 22104	100nF 20% 275V
2200	4822 124 40248	10µF 20% 63V
2201	4822 126 13879	220nF 20% 16V
2202	4822 126 13473	220nF 80-20% 50V
2203	4822 124 41584	100µF 20% 10V
2400	4822 124 11936	47µF 20% 160V
2401	4822 121 42077	6.8nF 10% 400V
2402	4822 124 12373	47µF 20% 250V
2403	2238 916 15641	22nF 10% 25V 0603
2404	2238 916 15641	22nF 10% 25V 0603
2405	4822 126 13841	1nF 20% 250V
2412	3198 024 44730	47nF 50V 0603
2413	4822 124 12255	10µF 20% 50V
2414	3198 024 44730	47nF 50V 0603
2415	4822 126 13883	220pF 5% 50V
2417	4822 126 14076	220nF 25V. 20%
2419	4822 126 14237	470pF 10% 2kV
2420	4822 121 70581	1.5nF 5% 2kV
2420	4822 121 70594	1nF 5% 2kV
2421	2038 301 00312	1.2µF 5% 250V
2421	4822 121 42634	560nF 5% 250V
2425	4822 121 10526	9.1nF 5% 2kV
2425	4822 121 70435	10nF 5% 2kV
2426	4822 121 10653	22nF 5% 630V
2430	4822 126 10206	2.2nF 10% 500V
2431	4822 126 10206	2.2nF 10% 500V
2433	2022 333 00087	510nF 5% 250V
2433	2022 333 00163	360nF 5% 250V
2440	2020 552 96448	1µF 10% 16V
2443	9965 000 09661	470pF 50V 10%
2448	5322 122 32268	470pF 5% 63V
2450	4822 121 42408	220nF 10% 50V
2450	5322 121 42578	100nF 5% 250V
2451	2020 012 93757	1000µF 20% 10V
2454	3198 017 31530	15nF 20% 50V 0603
2455	5322 126 11578	1nF 10% 50V 0603
2457	4822 126 13188	15nF 5% 63V
2458	4822 126 14241	330pF 50V 0603
2460	4822 124 81144	1000µF 16V
2461	4822 122 31169	1.5nF 10% 500V
2461	4822 126 11524	1.5nF 10% 1kV
2462	4822 124 11767	470µF 20% 25V
2463	4822 122 31177	470pF 10% 500V
2464	4822 124 11767	470µF 20% 25V
2465	4822 122 31177	470pF 10% 500V
2466	2238 586 59812	100nF 20-80% 50V 0603
2468	4822 122 31177	470pF 10% 500V
2480	5322 126 11582	6.8nF 10% 63V
2482	3198 017 34730	47nF 16V 0603
2483	3198 017 31530	15nF 20% 50V 0603
2490	4822 124 41584	100µF 20% 10V
2491	4822 124 81151	22µF 50V
2492	4822 124 41584	100µF 20% 10V
2494	2238 780 15654	220nF 10% 16V
2495	2238 780 15654	220nF 10% 16V
2496	2238 586 59812	100nF 20-80% 50V 0603
2497	4822 126 12105	33nF 5% 50V
2498	2020 552 96448	1µF 10% 16V
2499	5322 126 11579	3.3nF 10% 63V
2501	4822 126 13449	1nF 10% 2KV
2501	4822 126 14053	1nF 10% 2kV
2503	5322 121 42489	33nF 5% 250V
2504	2238 916 15641	22nF 10% 25V 0603
2505	2020 554 90169	470pF 20% 250V
2507	2222 338 22474	470nF 20% 275V
2508	4822 124 11913	22nF 20% 275V
2509	4822 124 11913	22nF 20% 275V
2510	4822 126 12263	220pF 10% 2kV
2512	4822 124 12056	1000µF 20% 35V
2513	4822 126 13881	470pF 5% 50V
2514	4822 126 14238	2.2nF 50V 0603
2515	4822 124 80096	47µF 200V
2516	2222 057 36221	220µF 20% 400V 057
2518	4822 122 31211	100pF 10% 500V
2519	4822 126 10206	2.2nF 10% 500V
2524	5322 126 11583	10nF 10% 50V 0603
2525	4822 126 14247	1.5nF 50V 0603
2526	2020 558 90571	2.2nF 10% 1kV
2527	4822 126 14237	470pF 10% 2kV
2528	4822 126 14472	1µF 10% 10V 0805
2530	4822 126 14472	1µF 10% 10V 0805
2531	4822 122 31175	1nF 10% 500V
2532	4822 126 14472	1µF 10% 10V 0805
2533	2020 557 90732	4.7nF 10% 250V
2535	4822 126 13193	4.7nF 10% 63V
2537	4822 124 11913	22nF 20% 275V
2538	4822 122 33177	10nF 20% 50V
2540	4822 124 21913	1µF 20% 63V
2541	4822 122 31211	100pF 10% 500V
2544	4822 126 14238	2.2nF 50V 0603
2547	2222 338 22104	100nF 20% 275V
2601	2238 586 59812	100nF 20-80% 50V 0603
2603	4822 126 13883	220pF 5% 50V
2604	4822 126 13473	220nF 80-20% 50V
2605	4822 126 13883	220pF 5% 50V
2620	4822 126 13473	220nF 80-20% 50V
2621	2238 586 59812	100nF 20-80% 50V 0603
2622	4822 124 40255	100µF 20% 63V
2623	4822 126 14238	2.2nF 50V 0603
2624	4822 121 51252	470nF 5% 63V
2625	4822 121 51252	470nF 5% 63V
2627	5322 124 40641	10µF 20% 100V
2628	4822 124 40255	100µF 20% 63V
2630	4822 126 14491	2.2µF -20+80% 10V 0805
2631	4822 126 14491	2.2µF -20+80% 10V 0805
2633	5322 126 11579	3.3nF 10% 63V
2635	2238 586 59812	100nF 20-80% 50V 0603
2642	4822 124 40255	100µF 20% 63V
2653	2238 586 15628	2.7nF 10% 50V 0603
2653	5322 126 11579	3.3nF 10% 63V
2656	2238 916 15641	22nF 10% 25V 0603
2657	2238 916 15641	22nF 10% 25V 0603
2659	2238 916 15641	22nF 10% 25V 0603
2660	5322 126 11578	1nF 10% 50V 0603
2701	4822 126 14043	1µF 20% 16V
2702	3198 016 31020	1nF 10% 25V 0603
2703	4822 126 14043	1µF 20% 16V
2704	3198 016 31020	1nF 10% 25V 0603
2707	4822 126 14043	1µF 20% 16V
2708	4822 124 11767	470µF 20% 25V
2709	3198 026 51020	1000µF 50V 20%
2710	4822 126 14585	100nF 10% 50V
2711	4822 124 80061	1000µF 20% 25V
2712	3198 017 34730	47nF 16V 0603
2713	3198 017 34730	47nF 16V 0603
2714	4822 124 80061	1000µF 20% 25V
2715	3198 017 34730	47nF 16V 0603
2716	3198 017 34730	47nF 16V 0603
2722	4822 124 40255	100µF 20% 63V
2914	4822 124 40248	10µF 20% 63V
2915	4822 124 40248	10µF 20% 63V
2918	4822 126 14585	100nF 10% 50V
2940	4822 124 41584	100µF 20% 10V
2941	4822 126 14585	100nF 10% 50V
2942	4822 126 14585	100nF 10% 50V
2943	4822 126 14585	100nF 10% 50V
2945	4822 126 14491	2.2µF -20+80% 10V 0805
2946	4822 126 14491	2.2µF -20+80% 10V 0805
2947	4822 124 40769	4.7µF 20% 100V
2950	5322 126 11583	10nF 10% 50V 0603
2951	5322 126 11583	10nF 10% 50V 0603
2987	5322 122 31863	330pF 5% 63V
2989	5322 122 31863	330pF 5% 63V
2990	5322 122 31863	330pF 5% 63V
2991	4822 051 20333	33kΩ 5% 0.1W
2991	5322 122 32531	100pF 5% 50V
2992	5322 122 31863	330pF 5% 63V
2993	4822 051 20333	33kΩ 5% 0.1W
2993	5322 122 32531	100pF 5% 50V
2994	5322 122 31863	330pF 5% 63V
2995	5322 122 31863	330pF 5% 63V
2996	5322 122 31863	330pF 5% 63V
2997	5322 122 31863	330pF 5% 63V
2998	4822 051 20333	33kΩ 5% 0.1W
2998	5322 122 32531	100pF 5% 50V
2999	4822 051 20333	33kΩ 5% 0.1W
2999	5322 122 32531	100pF 5% 50V

-WW-

3101	4822 053 20475	4.7MΩ 5% 0.25W
3102	4822 050 21002	1kΩ 1% 0.6W
3103	4822 050 21002	1kΩ 1% 0.6W
3104	4822 116 52195	47Ω 5% 0.5W
3105	4822 050 11002	1kΩ 1% 0.4W
3106	4822 116 52256	2.2kΩ 5% 0.5W
3107	4822 116 52256	2.2kΩ 5% 0.5W
3108	2122 101 01363	2.2Ω 5%
3111	4822 053 10152	1.5kΩ 5% 1W
3113	4822 116 52186	22Ω 5% 0.5W
3114	4822 116 52219	330Ω 5% 0.5W
3115	4822 116 52257	22kΩ 5% 0.5W
3116	4822 116 52257	22kΩ 5% 0.5W
3117	4822 116 52195	47Ω 5% 0.5W

3118	2122 101 01363	2.2Ω 5%
3120	4822 051 20109	10Ω 5% 0.1W
3123	4822 116 52176	10Ω 5% 0.5W
3124	4822 116 52199	68Ω 5% 0.5W
3125	4822 116 52182	15Ω 5% 0.5W
3126	4822 050 21003	10kΩ 1% 0.6W
3127	4822 116 52289	5.6kΩ 5% 0.5W
3130	4822 051 30479	47Ω 5% 0.062W
3131	4822 051 20471	470Ω 5% 0.1W
3132	4822 051 20479	47Ω 5% 0.1W
3133	4822 117 12925	47kΩ 1% 0.063W 0603
3134	4822 051 30102	1kΩ 5% 0.062W
3135	4822 051 30101	100Ω 5% 0.062W
3136	4822 051 30109	10Ω 5% 0.062W
3137	4822 050 24702	4.7kΩ 1% 0.6W
3138	4822 051 20105	1MΩ 5% 0.1W
3140	4822 051 20223	22kΩ 5% 0.1W
3141	4822 116 52263	2.7kΩ 5% 0.5W
3142	4822 051 30332	3.3kΩ 5% 0.062W
3143	4822 051 30101	100Ω 5% 0.062W
3144	4822 053 10221	220Ω 5% 1W
3150	4822 117 11373	100Ω 1% 0805
3151	4822 051 30109	10Ω 5% 0.062W
3152	4822 051 30102	1kΩ 5% 0.062W
3153	4822 051 20472	4.7kΩ 5% 0.1W
3155	4822 051 30101	100Ω 5% 0.062W
3156	5322 117 13017	100Ω 1% 0.063W 0603
3157	4822 051 30103	10kΩ 5% 0.062W
3158	2322 704 61801	180Ω 1% 0603
3158	5322 117 13061	180Ω 1% 0.063W 0603
3159	4822 051 30103	10kΩ 5% 0.062W
3160	4822 051 30102	1kΩ 5% 0.062W
3161	4822 052 10101	100Ω 5% 0.33W
3164	4822 117 13632	100kΩ 1% 0.62W 0603
3165	2322 704 61801	180Ω 1% 0603
3165	5322 117 13061	180Ω 1% 0.063W 0603
3168	4822 051 20472	4.7kΩ 5% 0.1W
3171	4822 116 52297	68kΩ 5% 0.5W
3172	4822 116 52297	68kΩ 5% 0.5W
3200	4822 051 20229	22Ω 5% 0.1W
3201	4822 051 20229	22Ω 5% 0.1W
3250	4822 117 10833	10kΩ 1% 0.1W
3261	4822 117 11373	100Ω 1% 0805
3262	4822 117 11373	100Ω 1% 0805
3400	4822 052 11108	1Ω 5% 0.5W
3401	4822 053 12279	27R00 5% 3W
3402	4822 053 10121	120Ω 5% 1W
3403	4822 116 52175	100Ω 5% 0.5W
3404	4822 051 30471	470Ω 5% 0.062W
3406	4822 117 11373	100Ω 1% 0805
3407	4822 051 30103	10kΩ 5% 0.062W
3409	4822 050 11002	1kΩ 1% 0.4W
3410	4822 051 20479	47Ω 5% 0.1W
3411	2122 101 02111	39Ω 5% 0,5W
3412	4822 117 11817	1.2kΩ 1% 0.062W
3414	4822 051 30331	330Ω 5% 0.062W
3415	3198 012 31590	15Ω 5% 3W
3417	4822 116 52176	10Ω 5% 0.5W
3418	4822 050 25603	56kΩ 1% 0.6W
3419	4822 051 30474	470kΩ 5% 0.062W
3420	4822 051 30332	3.3kΩ 5% 0.062W
3421	4822 051 30474	470kΩ 5% 0.062W
3422	4822 051 30332	3.3kΩ 5% 0.062W
3423	4822 053 10688	6.8Ω 5% 1W
3425	4822 116 52176	10Ω 5% 0.5W
3426	4822 116 52176	10Ω 5% 0.5W
3427	4822 051 30683	68kΩ 5% 0.062W
3427	4822 117 13632	100kΩ 1% 0.62W 0603
3428	4822 051 30684	680kΩ 5% 0.062W
3429	4822 051 30103	10kΩ 5% 0.062W
3429	4822 051 30223	22kΩ 5% 0.062W
3430	4822 051 30123	12kΩ 5% 0.062W
3430	4822 051 30223	22kΩ 5% 0.062W
3431	2306 207 03151	150Ω 5% 0.5W
3440	4822 051 30102	1kΩ 5% 0.062W
3441	4822 051 30223	22kΩ 5% 0.062W
3442	4822 051 30474	470kΩ 5% 0.062W
3443	4822 051 30684	680kΩ 5% 0.062W
3447	4822 117 11373	100Ω 1% 0805
3449	4822 052 10101	100Ω 5% 0.33W
3450	4822 050 21003	10kΩ 1% 0.6W
3451	4822 050 21003	10kΩ 1% 0.6W
3454	4822 051 20108	1Ω 5% 0.1W
3455	4822 117 12902	8.2kΩ 1% 0.063W 0603
3455	5322 117 13056	8.2kΩ 1% 0.063W 0603
3456	4822 117 12903	1.8kΩ 1% 0.063W 0603
3457	4822 051 30152	1.5kΩ 5% 0.062W
3458	4822 051 30471	470Ω 5% 0.062W
3459	4822 051 30272	2.7kΩ 5% 0.062W
3460	4822 052 10108	1Ω 5% 0.33W
3461	4822 052 10108	1Ω 5% 0.33W
3462	4822 052 11108	1Ω 5% 0.5W
3463	4822 052 11108	1Ω 5% 0.5W
3464	4822 052 11108	1Ω 5% 0.5W
3465	4822 052 11108	1Ω 5% 0.5W
3466	4822 051 30472	4.7kΩ 5% 0.062W
3467	4822 117 13632	100kΩ 1% 0.62W 0603
3472	4822 051 30393	39kΩ 5% 0.062W
3474	4822 051 30563	56kΩ 5% 0.062W
3475	4822 051 30472	4.7kΩ 5% 0.062W
3476	4822 116 83874	220kΩ 5% 0.5W
3478	4822 116 52175	100Ω 5% 0.5W
3479	4822 052 10478	4.7Ω 5% 0.33W
3480	4822 052 10478	4.7Ω 5% 0.33W
3480	4822 052 10688	6.8Ω 5% 0.33W
3481	2322 750 61001	100Ω 5% 1206
3482	4822 051 30221	220Ω 5% 0.062W
3483	4822 117 12903	1.8kΩ 1% 0.063W 0603
3485	4822 051 30471	470Ω 5% 0.062W
3486	2322 704 67502	7.5kΩ 1% 0,5W
3487	5322 117 13056	8.2kΩ 1% 0.063W 0603
3488	4822 050 21005	1MΩ 1% 0.6W
3489	4822 051 30103	10kΩ 5% 0.062W
3490	4822 051 30332	3.3kΩ 5% 0.062W
3491	4822 117 12925	47kΩ 1% 0.063W 0603
3492	4822 116 52175	100Ω 5% 0.5W
3493	4822 050 21504	150kΩ 1% 0.6W
3495	4822 050 21503	15kΩ 1% 0.6W
3496	4822 051 30272	2.7kΩ 5% 0.062W
3497	4822 051 30333	33kΩ 5% 0.062W
3501	2120 103 90057	100Ω 20% 0.5W
3504	4822 051 30222	2.2kΩ 5% 0.062W
3505	4822 116 52257	22kΩ 5% 0.5W
3506	4822 051 30562	5.6kΩ 5% 0.063W 0603
3507	4822 050 21604	160kΩ 1% 0.6W
3508	4822 116 52182	15Ω 5% 0.5W
3509	2122 550 00158	VDR 1mA 612V
3510	5322 117 12487	1kΩ 1% 0.125W
3511	4822 053 11222	2.2kΩ 5% 2W
3512	4822 117 12891	220kΩ 1% 0.063W 0603
3513	4822 116 52272	330k 5% 0.5W
3514	2322 193 53397	0.39Ω 5% 0.6W
3515	2322 193 53397	0.39Ω 5% 0.6W
3517	4822 117 10834	47kΩ 1% 0.1W
3518	4822 116 52234	100kΩ 5% 0,5W
3519	4822 051 30102	1kΩ 5% 0.062W
3520	4822 053 11333	33kΩ 5% 2W
3521	4822 053 21155	1.5Ω 5% 0.5W
3522	4822 117 11507	6.8kΩ 1% 0.1W
3523	4822 051 20105	1MΩ 5% 0.1W
3524	4822 051 30333	33kΩ 5% 0.062W
3525	4822 051 30479	47Ω 5% 0.062W
3527	4822 117 11951	2kΩ 1% 0.1W
3528	4822 051 30103	10kΩ 5% 0.062W
3529	4822 051 30472	4.7kΩ 5% 0.062W
3530	4822 051 30102	1kΩ 5% 0.062W
3531	4822 117 11507	6.8kΩ 1% 0.1W
3532	4822 117 12925	47kΩ 1% 0.063W 0603
3533	4822 116 52182	15Ω 5% 0.5W
3534	4822 117 12925	47kΩ 1% 0.063W 0603
3535	4822 051 30479	47Ω 5% 0.062W
3536	4822 051 30152	1.5kΩ 5% 0.062W
3537	4822 052 10102	1kΩ 5% 0.33W
3540	4822 050 23303	33k 1% 0.6W
3541	4822 116 52186	22Ω 5% 0.5W
3543	4822 050 24708	4.7Ω 1% 0.6W
3547	4822 051 30008	Jumper 0603
3549	4822 051 30393	39kΩ 5% 0.062W
3550	2122 663 00018	PTC 4.7Ω 20%
3552	4822 051 30222	2.2kΩ 5% 0.062W
3553	4822 051 30103	10kΩ 5% 0.062W
3610	4822 051 30223	22kΩ 5% 0.062W
3611	4822 051 30222	2.2kΩ 5% 0.062W
3620	4822 050 21808	1.8Ω 1% 0,6W
3620	4822 116 80176	1Ω 5% 0.5W
3621	4822 116 80176	1Ω 5% 0.5W
3622	4822 116 81154	2.2Ω 5% 0.5W
3622	5322 116 53564	3.3Ω 5% 0.5W
3623	4822 116 52251	18kΩ 5% 0.5W
3624	4822 052 10158	1.5Ω 5% 0.33W
3625	4822 116 52206	120Ω 5% 0.5W
3625	4822 116 52219	330Ω 5% 0.5W
3626	4822 116 52175	100Ω 5% 0.5W
3626	4822 116 52219	330Ω 5% 0.5W
3627	4822 051 20223	22kΩ 5% 0.1W
3630	4822 051 30333	33kΩ 5% 0.062W
3631	4822 051 30222	2.2kΩ 5% 0.062W
3632	4822 051 30393	39kΩ 5% 0.062W
3633	4822 051 30563	56kΩ 5% 0.062W
3634	4822 116 83882	39kΩ 5% 0.5W
3635	4822 116 52219	330Ω 5% 0.5W
3636	4822 051 30223	22kΩ 5% 0.062W
3637	4822 051 30103	10kΩ 5% 0.062W
3638	4822 051 30474	470kΩ 5% 0.062W
3639	4822 051 30563	56kΩ 5% 0.062W
3640	4822 051 30222	2.2kΩ 5% 0.062W
3641	4822 116 83883	470Ω 5% 0.5W
3642	4822 101 11193	47kΩ 30% 0.1W
3643	4822 051 30334	330kΩ 5% 0.062W
3644	4822 051 30221	220Ω 5% 0.062W
3645	4822 116 52245	150kΩ 5% 0.5W
3646	4822 117 12925	47kΩ 1% 0.063W 0603
3647	4822 051 20228	2.2Ω 5% 0.1W
3652	4822 051 20479	47Ω 5% 0.1W
3653	4822 051 20223	22kΩ 5% 0.1W
3655	4822 051 30123	12kΩ 5% 0.062W
3656	4822 117 11817	1.2kΩ 1% 0.062W
3657	4822 051 30223	22kΩ 5% 0.062W
3658	4822 051 30223	22kΩ 5% 0.062W
3659	4822 051 30222	2.2kΩ 5% 0.062W
3660	4822 051 30562	5.6kΩ 5% 0.063W 0603
3661	4822 116 52226	560Ω 5% 0.5W
3662	4822 051 30152	1.5kΩ 5% 0.062W
3681	4822 116 52207	1.2kΩ 5% 0.5W
3682	4822 117 13632	100kΩ 1% 0.62W 0603
3683	4822 051 30103	10kΩ 5% 0.062W
3684	4822 051 30682	6.8kΩ 5% 0.062W
3685	4822 051 30273	27kΩ 5% 0.062W
3686	4822 051 30563	56kΩ 5% 0.062W
3687	4822 116 52207	1.2kΩ 5% 0.5W
3688	4822 051 20684	680kΩ 5% 0.1W
3690	4822 051 30109	10Ω 5% 0.062W
3701	4822 051 30103	10kΩ 5% 0.062W
3701	4822 117 12925	47kΩ 1% 0.063W 0603
3702	4822 051 30223	22kΩ 5% 0.062W
3703	4822 051 30103	10kΩ 5% 0.062W
3703	4822 117 12925	47kΩ 1% 0.063W 0603
3704	4822 051 30223	22kΩ 5% 0.062W
3707	4822 051 30103	10kΩ 5% 0.062W
3708	4822 117 12925	47kΩ 1% 0.063W 0603
3710	4822 117 12925	47kΩ 1% 0.063W 0603
3711	4822 051 30103	10kΩ 5% 0.062W
3713	2322 702 81828	8.2Ω 5% 0.1W 0603
3714	2322 702 81828	8.2Ω 5% 0.1W 0603
3716	4822 050 21003	10kΩ 1% 0.6W
3719	4822 051 30103	10kΩ 5% 0.062W
3720	4822 052 10108	1Ω 5% 0.33W
3721	4822 052 10108	1Ω 5% 0.33W
3725	4822 116 52251	18kΩ 5% 0.5W
3726	4822 050 21003	10kΩ 1% 0.6W
3904	4822 052 10688	6.8Ω 5% 0.33W
3905	4822 051 30101	100Ω 5% 0.062W
3912	4822 051 30008	Jumper 0603
3928	4822 051 30101	100Ω 5% 0.062W
3929	4822 051 30103	10kΩ 5% 0.062W
3930	4822 051 20561	560Ω 5% 0.1W
3938	4822 117 11373	100Ω 1% 0805
3939	4822 051 30103	10kΩ 5% 0.062W
3940	4822 051 20561	560Ω 5% 0.1W
3941	4822 052 10688	6.8Ω 5% 0.33W
3959	4822 117 10353	150Ω 1% 0.1W
3960	4822 117 10353	150Ω 1% 0.1W
3961	4822 117 10353	150Ω 1% 0.1W
3962	4822 117 10353	150Ω 1% 0.1W
3965	4822 117 10353	150Ω 1% 0.1W
3966	4822 117 10353	150Ω 1% 0.1W
3967	4822 116 52201	75Ω 5% 0.5W
3968	4822 116 52201	75Ω 5% 0.5W
3969	4822 051 20008	Jumper 0805
3969	4822 117 11373	100Ω 1% 0805
3970	4822 051 20008	Jumper 0805
3970	4822 117 11373	100Ω 1% 0805
3971	4822 116 52201	75Ω 5% 0.5W
3972	4822 116 52201	75Ω 5% 0.5W
3973	4822 116 52201	75Ω 5% 0.5W
3974	4822 116 52201	75Ω 5% 0.5W
3975	4822 116 52201	75Ω 5% 0.5W
3976	4822 117 11373	100Ω 1% 0805
3977	4822 051 20008	Jumper 0805
3977	4822 117 11373	100Ω 1% 0805
3978	4822 051 20008	Jumper 0805
3978	4822 117 11373	100Ω 1% 0805
3979	4822 116 52201	75Ω 5% 0.5W
3980	4822 051 20008	Jumper 0805
3980	4822 117 11373	100Ω 1% 0805
3981	4822 051 10102	1kΩ 2% 0.25W
3981	4822 117 10833	10kΩ 1% 0.1W
3982	4822 051 20392	3.9kΩ 5% 0.1W
3982	4822 051 20393	39kΩ 5% 0.1W
3983	4822 116 52175	100Ω 5% 0.5W
3984	4822 051 10102	1kΩ 2% 0.25W
3984	4822 117 10833	10kΩ 1% 0.1W
3985	4822 116 52201	75Ω 5% 0.5W
3986	4822 116 52276	3.9kΩ 5% 0.5W
3986	4822 116 83882	39kΩ 5% 0.5W
3987	4822 116 52175	100Ω 5% 0.5W
3988	4822 051 10102	1kΩ 2% 0.25W
3988	4822 117 11373	100Ω 1% 0805
3989	4822 050 11002	1kΩ 1% 0.4W
3989	4822 116 52175	100Ω 5% 0.5W
3990	4822 117 10353	150Ω 1% 0.1W
3991	4822 117 10353	150Ω 1% 0.1W

3992	4822 117 10353	150Ω 1% 0.1W
3993	4822 116 83868	150Ω 5% 0.5W
3994	4822 051 10102	1kΩ 2% 0.25W
3994	4822 117 11373	100Ω 1% 0805
3995	4822 051 10102	1kΩ 2% 0.25W
3995	4822 117 11373	100Ω 1% 0805
3996	4822 117 10353	150Ω 1% 0.1W
3997	4822 117 10353	150Ω 1% 0.1W
4xxx	4822 051 30008	Jumper 0603
9xxx	4822 051 20008	Jumper 0805
9xxx	4822 051 30008	Jumper 0603

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5100	3104 308 20431	Transformer BS25126-03
5101	4822 526 10704	Bead 45Ω at 50MHz
5102	2422 535 94639	10µH 20%
5103	4822 526 10704	Bead 45Ω at 50MHz
5104	4822 157 11411	Bead 83Ω at 100MHz
5105	2422 535 94632	1µH 30%
5106	4822 157 11716	Bead 30Ω at 100MHz
5107	4822 157 11716	Bead 30Ω at 100MHz
5108	4822 526 10704	Bead 45Ω at 50MHz
5110	4822 526 10704	Bead 45Ω at 50MHz
5111	4822 157 11411	Bead 83Ω at 100MHz
5113	4822 157 11411	Bead 83Ω at 100MHz
5130	4822 157 11411	Bead 83Ω at 100MHz
5400	4822 157 11869	33µH 10%
5401	2422 536 00059	12µH 10%
5402	3198 018 21510	150µH 10%
5410	3128 138 39091	Transformer CE165T
5411	4822 157 71097	0.56µH 10%
5421	3104 308 20471	Linearity coil 28"/29"
5421	3104 308 20591	Linearity coil 32"
5422	2422 531 02357	Bridge coil W7132-004Y 29"
5422	4822 146 11137	Bridge coil W7131-003 28"/32"
5423	4822 157 71097	0.56µH 10%
5425	4822 157 11411	Bead 83Ω at 100MHz
5426	4822 157 11411	Bead 83Ω at 100MHz
5430	3104 308 20491	LOT 1392.9014A
5461	4822 157 11411	Bead 83Ω at 100MHz
5463	4822 157 11411	Bead 83Ω at 100MHz
5465	4822 157 11411	Bead 83Ω at 100MHz
5467	4822 157 11411	Bead 83Ω at 100MHz
5469	4822 157 11411	Bead 83Ω at 100MHz
5503	2422 549 44877	Filter 45mH DMF2845H
5505	4822 157 11411	Bead 83Ω at 100MHz
5506	2422 531 02575	Transformer SMT BS30029-01
5506	2422 531 02635	Transformer SMT SS30327-01 B
5507	4822 157 11411	Bead 83Ω at 100MHz
5511	3104 308 20511	Filter mains 40mH
5515	4822 157 11869	33µH 10%
5517	4822 157 11411	Bead 83Ω at 100MHz
5518	4822 526 10704	Bead 45Ω at 50MHz
5519	4822 157 11716	Bead 30Ω at 100MHz
5520	4822 157 11411	Bead 83Ω at 100MHz
5620	4822 157 11771	0.09µH 10%
5621	3104 308 20571	Transf. S13974-03
5901	4822 157 11299	10µH 5%
5902	3198 018 71010	100µF 10%
5903	4822 157 10359	33µH 10%
5904	4822 157 11411	Bead 83Ω at 100MHz

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6080	4822 130 11397	BAS316
6082	4822 130 80622	BAT54
6103	4822 130 41601	BYV95A
6104	9340 548 67115	PDZ22B
6105	4822 130 34281	BZX79-B15
6106	3198 010 52290	BZX79-B22
6108	4822 130 80622	BAT54
6109	4822 130 31083	BYW55
6110	4822 130 41487	BYV95C
6111	9322 161 78682	SB360L-7024
6112	4822 130 11551	UDZS10B
6115	4822 130 80622	BAT54
6120	4822 130 30621	1N4148
6121	4822 130 30621	1N4148
6122	3198 010 53980	BZX79-B3V9
6130	4822 130 11596	BYW29EX-200
6132	9322 171 80685	BZX384-B6V8
6133	4822 130 11397	BAS316
6134	4822 130 11397	BAS316
6141	4822 130 11522	UDZ15B
6142	4822 130 80622	BAT54
6144	4822 130 11397	BAS316
6147	4822 130 34278	BZX79-B6V8
6148	5322 130 31938	BYV27-200
6149	4822 130 11397	BAS316
6200	9340 548 71115	PDZ33B
6202	4822 130 11397	BAS316
6400	4822 130 41601	BYV95A
6402	4822 130 11397	BAS316
6405	4822 130 34383	BZX79-B47
6406	4822 130 11397	BAS316
6407	4822 130 11397	BAS316
6408	4822 130 41601	BYV95A
6421	4822 130 10753	BY359X-1500
6422	4822 130 10218	BY229X-800
6442	4822 130 11522	UDZ15B
6455	4822 130 11397	BAS316
6456	5322 130 34337	BAV99
6457	9322 102 64685	UDZ2.7B
6458	3198 020 55680	BZX384-C5V6
6460	4822 130 41487	BYV95C
6462	9340 559 53112	BYW95C-24
6464	9340 559 53112	BYW95C-24
6480	4822 130 31607	RGP10D
6481	4822 130 11522	UDZ15B
6482	4822 130 11397	BAS316
6483	4822 130 80622	BAT54
6493	4822 130 80622	BAT54
6499	4822 130 11551	UDZS10B
6505	4822 130 34281	BZX79-B15
6506	4822 130 80622	BAT54
6509	4822 130 11397	BAS316
6510	4822 130 61219	BZX79-B10
6511	4822 130 11397	BAS316
6512	4822 130 11397	BAS316
6514	5322 130 31932	BZT03-C200
6515	4822 130 33657	BZV85-C6V8
6516	4822 130 11397	BAS316
6517	4822 130 80622	BAT54
6525	3198 010 10640	Bridge cell GBU4K
6530	4822 130 41487	BYV95C
6534	9322 165 72687	DTV1500MFP
6535	4822 130 11572	STPS8H100F
6537	4822 130 11397	BAS316
6538	4822 130 11397	BAS316
6614	4822 130 80622	BAT54
6615	4822 130 11397	BAS316
6616	4822 130 11397	BAS316
6617	4822 130 11397	BAS316
6618	4822 130 11397	BAS316
6619	4822 130 31607	RGP10D
6620	5322 130 31938	BYV27-200
6621	4822 130 31607	RGP10D
6623	4822 130 11397	BAS316
6624	4822 130 11397	BAS316
6625	4822 130 11397	BAS316
6626	4822 130 11397	BAS316
6627	4822 130 11397	BAS316
6901	4822 130 11416	PDZ6.8B
6950	4822 130 11416	PDZ6.8B
6951	4822 130 11416	PDZ6.8B
6953	4822 130 11416	PDZ6.8B
6954	4822 130 11416	PDZ6.8B
6955	4822 130 11416	PDZ6.8B
6956	4822 130 11416	PDZ6.8B
6957	4822 130 11416	PDZ6.8B
6958	4822 130 11416	PDZ6.8B
6959	4822 130 11416	PDZ6.8B
6960	9340 548 61115	PDZ12B
6961	4822 130 11416	PDZ6.8B
6962	4822 130 11416	PDZ6.8B

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7100	4822 130 44568	BC557B
7101	4822 130 40981	BC337-25
7102	9322 160 34687	FQPF3N60
7103	9322 149 04682	TCET1102
7130	5322 130 60159	BC846B
7131	4822 130 11336	STP16NE06FP
7132	5322 130 60159	BC846B
7133	4822 130 60373	BC856B
7140	5322 130 60159	BC846B
7141	4822 130 11336	STP16NE06FP
7408	5322 130 44647	BC368
7409	5322 130 60159	BC846B
7421	9340 210 30127	BU2520DX
7440	4822 209 70672	LM358N SEL.
7441	4822 130 60373	BC856B
7442	4822 130 60373	BC856B
7443	5322 130 60159	BC846B
7445	5322 130 60159	BC846B
7450	5322 209 61472	LM393M
7455	4822 209 73852	PMBT2369
7480	4822 130 11417	STP3NB60FP
7482	4822 130 11418	TCDT1102G
7486	5322 130 60159	BC846B
7487	5322 130 60159	BC846B
7501	5322 130 60159	BC846B
7502	4822 130 40959	BC547B
7504	9322 194 20687	STP5NK50ZFP
7506	4822 209 14933	TL431IZ
7507	9322 149 04682	TCET1102
7528	4822 130 40981	BC337-25
7529	4822 130 44461	BC546B
7530	5322 130 60159	BC846B
7611	5322 130 60159	BC846B
7612	5322 130 60159	BC846B
7613	4822 209 81397	TL431CLPST
7614	5322 130 60159	BC846B
7620	4822 209 90009	TDA8177
7641	5322 130 60159	BC846B
7652	5322 130 60159	BC846B
7653	5322 130 60159	BC846B
7654	4822 130 60373	BC856B
7680	4822 209 60956	TDA7052/N2
7681	5322 130 60159	BC846B
7682	5322 130 44647	BC368
7701	9322 166 94682	TDA7495S
7710	5322 130 60159	BC846B
7711	5322 130 60159	BC846B
7901	5322 130 60159	BC846B
7902	5322 130 60159	BC846B
7910	9322 152 53687	LD1086V33
7912	5322 209 86445	LM7805CT

Small Signal Board [B]

Various

1112	2422 549 44369	SAW 38.9MHz K9656L
1113	2422 549 44372	SAW 38.9MHz K3953L
1581	2422 543 01359	Xtal 13.5MHz 12pF NX8045

⊣⊢

2002	2020 552 96507	10µF 10V
2003	2020 552 96507	10µF 10V
2005	2020 552 96618	1nF 10% 50V 0402
2006	2020 552 96618	1nF 10% 50V 0402
2008	2020 552 96618	1nF 10% 50V 0402
2012	3198 017 44740	470nF 10V 0603
2013	3198 035 04710	470pF 50V 0402
2014	3198 035 71040	100nF 10% 16V 0402
2015	3198 035 04710	470pF 50V 0402
2016	3198 017 44740	470nF 10V 0603
2018	3198 035 04710	470pF 50V 0402
2019	3198 017 44740	470nF 10V 0603
2021	3198 035 04710	470pF 50V 0402
2022	3198 017 44740	470nF 10V 0603
2024	3198 035 04710	470pF 50V 0402
2025	3198 017 44740	470nF 10V 0603
2027	3198 035 04710	470pF 50V 0402
2028	3198 017 44740	470nF 10V 0603
2030	2020 552 96618	1nF 10% 50V 0402
2031	2020 552 96618	1nF 10% 50V 0402
2032	2020 552 96618	1nF 10% 50V 0402
2033	2020 552 96618	1nF 10% 50V 0402
2037	2020 552 96507	10µF 10V
2038	2020 552 96507	10µF 10V
2039	2020 552 96507	10µF 10V
2040	2020 552 96507	10µF 10V
2045	3198 030 82280	2.2µF 20% 50V
2046	5322 124 41945	22µF 20% 35V
2047	4822 124 23002	10µF 20% 16V
2048	3198 035 71040	100nF 10% 16V 0402
2049	3198 035 71040	100nF 10% 16V 0402
2050	3198 035 71040	100nF 10% 16V 0402
2051	3198 035 71040	100nF 10% 16V 0402
2060	3198 035 71040	100nF 10% 16V 0402
2062	3198 035 71040	100nF 10% 16V 0402
2063	3198 035 71040	100nF 10% 16V 0402
2065	3198 035 71040	100nF 10% 16V 0402
2066	3198 035 71040	100nF 10% 16V 0402
2067	3198 035 71040	100nF 10% 16V 0402
2068	3198 035 71040	100nF 10% 16V 0402
2071	3198 035 71040	100nF 10% 16V 0402
2072	3198 035 71040	100nF 10% 16V 0402
2073	3198 035 71040	100nF 10% 16V 0402
2078	3198 035 71040	100nF 10% 16V 0402
2079	3198 035 71040	100nF 10% 16V 0402
2081	3198 035 71040	100nF 10% 16V 0402
2082	4822 126 14491	2.2µF -20+80% 10V 0805
2083	3198 035 71040	100nF 10% 16V 0402
2084	3198 035 71040	100nF 10% 16V 0402
2085	3198 035 71040	100nF 10% 16V 0402

2088	4822 126 14491	2.2µF -20+80% 10V 0805
2101	3198 035 71030	10nF 16V 0402
2102	3198 035 71030	10nF 16V 0402
2119	3198 035 71030	10nF 16V 0402
2126	2238 869 15101	100pF 5% 50V 0402
2127	3198 035 71040	100nF 10% 16V 0402
2128	3198 030 82280	2.2µF 20% 50V
2130	3198 035 71030	10nF 16V 0402
2134	3198 035 71040	100nF 10% 16V 0402
2135	4822 124 23002	10µF 20% 16V
2136	4822 124 23002	10µF 20% 16V
2137	4822 124 12095	100µF 20% 16V
2138	3198 035 71040	100nF 10% 16V 0402
2150	3198 035 71040	100nF 10% 16V 0402
2151	3198 030 82280	2.2µF 20% 50V
2152	3198 035 71040	100nF 10% 16V 0402
2154	4822 124 23002	10µF 20% 16V
2155	3198 035 71040	100nF 10% 16V 0402
2156	3198 035 71040	100nF 10% 16V 0402
2157	3198 035 71040	100nF 10% 16V 0402
2281	3198 035 71040	100nF 10% 16V 0402
2282	3198 035 71040	100nF 10% 16V 0402
2284	3198 035 71040	100nF 10% 16V 0402
2285	3198 035 71040	100nF 10% 16V 0402
2300	3198 035 71040	100nF 10% 16V 0402
2305	3198 017 41050	1µF 10V 0603
2307	2238 869 15101	100pF 5% 50V 0402
2308	2238 869 15101	100pF 5% 50V 0402
2310	4822 124 23002	10µF 20% 16V
2311	3198 035 71030	10nF 16V 0402
2317	2238 869 15101	100pF 5% 50V 0402
2318	2238 869 15101	100pF 5% 50V 0402
2321	3198 035 71030	10nF 16V 0402
2324	2238 869 15101	100pF 5% 50V 0402
2325	2238 869 75829	82pF 5% 50V 0402
2327	2238 869 15101	100pF 5% 50V 0402
2328	2238 869 15101	100pF 5% 50V 0402
2331	3198 035 71030	10nF 16V 0402
2341	3198 035 71040	100nF 10% 16V 0402
2342	3198 035 71040	100nF 10% 16V 0402
2343	3198 035 71040	100nF 10% 16V 0402
2344	3198 035 71040	100nF 10% 16V 0402
2345	3198 035 71040	100nF 10% 16V 0402
2346	3198 035 71040	100nF 10% 16V 0402
2350	4822 124 12095	100µF 20% 16V
2351	2238 869 15109	10pF 5% 50V 0402
2352	2238 869 15109	10pF 5% 50V 0402
2358	2238 869 15101	100pF 5% 50V 0402
2359	3198 035 71040	100nF 10% 16V 0402
2360	2238 869 15101	100pF 5% 50V 0402
2361	4822 126 14491	2.2µF -20+80% 10V 0805
2363	2238 869 15101	100pF 5% 50V 0402
2364	4822 126 14491	2.2µF -20+80% 10V 0805
2365	2238 869 15101	100pF 5% 50V 0402
2366	4822 126 14491	2.2µF -20+80% 10V 0805
2371	2020 552 96618	1nF 10% 50V 0402
2372	2020 552 96618	1nF 10% 50V 0402
2377	2020 552 96623	2.2nF 10% 50V 0402
2379	2020 552 96623	2.2nF 10% 50V 0402
2380	3198 035 04710	470pF 50V 0402
2384	2020 552 96618	1nF 10% 50V 0402
2386	2238 869 15109	10pF 5% 50V 0402
2395	3198 035 71030	10nF 16V 0402
2397	3198 035 71040	100nF 10% 16V 0402
2432	2020 552 96618	1nF 10% 50V 0402
2433	2020 552 96618	1nF 10% 50V 0402
2434	3198 017 44740	470nF 10V 0603
2435	3198 017 44740	470nF 10V 0603
2438	3198 017 44740	470nF 10V 0603
2439	3198 017 44740	470nF 10V 0603
2440	2020 552 96618	1nF 10% 50V 0402
2441	2020 552 96618	1nF 10% 50V 0402
2442	2020 552 96618	1nF 10% 50V 0402
2443	2020 552 96618	1nF 10% 50V 0402
2444	2020 552 96618	1nF 10% 50V 0402
2445	2020 552 96618	1nF 10% 50V 0402
2447	4822 124 12095	100µF 20% 16V
2450	3198 035 71030	10nF 16V 0402
2452	3198 035 71030	10nF 16V 0402
2454	4822 126 14491	2.2µF -20+80% 10V 0805
2457	4822 126 14491	2.2µF -20+80% 10V 0805
2461	3198 017 44740	470nF 10V 0603
2462	3198 017 44740	470nF 10V 0603
2480	3198 017 44740	470nF 10V 0603
2481	3198 017 44740	470nF 10V 0603
2483	2020 552 96618	1nF 10% 50V 0402
2484	4822 124 23002	10µF 20% 16V
2485	2020 552 96618	1nF 10% 50V 0402
2486	3198 035 71040	100nF 10% 16V 0402
2487	4822 124 23002	10µF 20% 16V
2488	4822 124 12095	100µF 20% 16V
2489	4822 124 12095	100µF 20% 16V
2514	2238 869 15189	18pF 5% 50V 0402
2516	2238 869 15189	18pF 5% 50V 0402
2525	3198 035 71040	100nF 10% 16V 0402
2546	3198 035 71040	100nF 10% 16V 0402
2557	2238 869 15101	100pF 5% 50V 0402
2571	3198 035 71040	100nF 10% 16V 0402
2581	4822 126 14519	22pF 5% 50V 0402
2582	4822 126 14519	22pF 5% 50V 0402
2583	3198 035 71040	100nF 10% 16V 0402
2584	3198 035 71040	100nF 10% 16V 0402
2600	3198 035 71040	100nF 10% 16V 0402
2601	3198 035 71040	100nF 10% 16V 0402
2604	3198 035 71040	100nF 10% 16V 0402
2607	3198 035 71040	100nF 10% 16V 0402
2609	3198 035 71040	100nF 10% 16V 0402
2611	3198 035 71040	100nF 10% 16V 0402
2612	3198 035 71040	100nF 10% 16V 0402
2615	3198 035 71040	100nF 10% 16V 0402
2618	3198 035 71040	100nF 10% 16V 0402
2620	3198 035 71040	100nF 10% 16V 0402
2622	3198 035 71040	100nF 10% 16V 0402
2623	3198 035 71040	100nF 10% 16V 0402
2628	3198 035 71040	100nF 10% 16V 0402
2629	3198 035 71040	100nF 10% 16V 0402
2630	3198 035 71040	100nF 10% 16V 0402
2633	3198 035 71040	100nF 10% 16V 0402
2634	3198 035 71040	100nF 10% 16V 0402
2638	3198 035 71040	100nF 10% 16V 0402
2644	5322 124 41945	22µF 20% 35V
2645	4822 124 23002	10µF 20% 16V
2651	2020 021 91679	100µF 20% 6.3V
2652	2020 552 96507	10µF 10V
2654	2020 552 96507	10µF 10V
2655	2020 552 96507	10µF 10V
2656	3198 035 71040	100nF 10% 16V 0402
2657	2238 869 15101	100pF 5% 50V 0402
2659	4822 126 13879	220nF 20% 16V
2730	3198 035 71040	100nF 10% 16V 0402
2731	3198 035 71040	100nF 10% 16V 0402
2732	3198 035 71040	100nF 10% 16V 0402
2733	3198 035 71040	100nF 10% 16V 0402
2734	3198 035 71040	100nF 10% 16V 0402
2792	3198 035 71040	100nF 10% 16V 0402
2793	3198 035 71040	100nF 10% 16V 0402
2918	2238 869 15101	100pF 5% 50V 0402
2919	2238 869 15101	100pF 5% 50V 0402
2920	2238 869 75829	82pF 5% 50V 0402
2932	2238 869 15101	100pF 5% 50V 0402
2933	2238 869 15101	100pF 5% 50V 0402
2935	2238 869 15101	100pF 5% 50V 0402
2936	2238 869 15101	100pF 5% 50V 0402
2938	2238 869 15101	100pF 5% 50V 0402
2948	2238 869 15189	18pF 5% 50V 0402
2949	2238 869 15189	18pF 5% 50V 0402
2950	2238 869 15101	100pF 5% 50V 0402
2951	2238 869 15101	100pF 5% 50V 0402
2962	2238 869 15101	100pF 5% 50V 0402
2967	2020 552 96618	1nF 10% 50V 0402
2968	2020 552 96618	1nF 10% 50V 0402
2975	2020 552 96793	4.7nF 10% 50V 0402
2976	2020 552 96793	4.7nF 10% 50V 0402
2977	2238 869 15101	100pF 5% 50V 0402
2978	2238 869 15101	100pF 5% 50V 0402
2979	2238 869 15101	100pF 5% 50V 0402

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3002	3198 031 04730	47Ω 5% 0402
3003	3198 031 04730	47Ω 5% 0402
3004	3198 031 04730	47Ω 5% 0402
3005	3198 031 04730	47Ω 5% 0402
3006	3198 031 04730	47Ω 5% 0402
3007	3198 031 04730	47Ω 5% 0402
3010	4822 117 13605	Jumper 0402
3011	4822 117 13605	Jumper 0402
3018	4822 117 11152	4.7Ω 5% 0.062W
3019	5322 117 11726	10Ω 5%
3022	3198 031 04730	47Ω 5% 0402
3024	3198 031 04730	47Ω 5% 0402
3026	3198 031 04730	47Ω 5% 0402
3027	3198 031 04730	47Ω 5% 0402
3060	4822 117 13602	2.2kΩ 5% 0.01W 0402
3061	4822 117 13602	2.2kΩ 5% 0.01W 0402
3062	3198 031 01810	180Ω 5% 0402
3063	3198 031 01810	180Ω 5% 0402
3066	4822 117 13602	2.2kΩ 5% 0.01W 0402
3067	4822 117 13548	1kΩ 5% 0402
3068	4822 117 13548	1kΩ 5% 0402
3101	4822 117 13602	2.2kΩ 5% 0.01W 0402
3103	3198 031 06820	6.8kΩ 5% 0.01W 0402
3104	4822 117 13602	2.2kΩ 5% 0.01W 0402
3106	3198 031 02730	27kΩ 5% 0402
3131	3198 031 04720	4.7kΩ 5% 0402
3132	4822 117 13545	100Ω 1% 0402
3138	3198 031 03910	390Ω 1% 0402
3150	3198 031 01820	1K8 5% 0402
3151	3198 031 01220	1K2 5% 0402
3152	3198 031 01820	1K8 5% 0402
3153	3198 031 01220	1K2 5% 0402
3154	3198 031 04730	47Ω 5% 0402
3155	3198 031 08210	820Ω 5% 0,5W
3281	4822 117 13548	1kΩ 5% 0402
3282	4822 117 13548	1kΩ 5% 0402
3283	4822 117 13548	1kΩ 5% 0402
3284	4822 117 13548	1kΩ 5% 0402
3302	3198 031 01220	1K2 5% 0402
3303	3198 031 06820	6.8kΩ 5% 0.01W 0402
3304	4822 117 13597	330Ω 5% 0402 0.01W
3305	4822 117 13548	1kΩ 5% 0402
3306	3198 031 03390	33Ω 1% 0402
3307	2322 705 87189	18Ω 5% 0402
3309	4822 051 30331	330Ω 5% 0.062W
3310	3198 031 01220	1K2 5% 0402
3311	3198 031 03390	33Ω 1% 0402
3312	3198 031 01220	1K2 5% 0402
3313	4822 117 13597	330Ω 5% 0402 0.01W
3316	2322 705 87189	18Ω 5% 0402
3318	3198 031 01220	1K2 5% 0402
3319	4822 051 30331	330Ω 5% 0.062W
3320	3198 031 01220	1K2 5% 0402
3321	3198 031 03390	33Ω 1% 0402
3322	3198 031 01220	1K2 5% 0402
3323	4822 117 13597	330Ω 5% 0402 0.01W
3325	3198 031 04720	4.7kΩ 5% 0402
3326	4822 117 13543	470Ω 5% 0402
3329	4822 051 30331	330Ω 5% 0.062W
3330	3198 031 01220	1K2 5% 0402
3331	3198 031 03390	33Ω 1% 0402
3332	3198 031 01220	1K2 5% 0402
3333	4822 117 13597	330Ω 5% 0402 0.01W
3334	3198 031 03390	33Ω 1% 0402
3335	3198 031 03390	33Ω 1% 0402
3336	3198 031 03390	33Ω 1% 0402
3337	3198 031 03390	33Ω 1% 0402
3338	2322 705 87189	18Ω 5% 0402
3340	4822 117 13548	1kΩ 5% 0402
3343	4822 117 13606	10kΩ 5% 0.01W 0402
3345	3198 031 06820	6.8kΩ 5% 0.01W 0402
3346	4822 117 13548	1kΩ 5% 0402
3347	4822 117 13601	22kΩ 5% 0402
3348	4822 117 13601	22kΩ 5% 0402
3349	3198 031 04730	47Ω 5% 0402
3350	4822 117 13596	220Ω 5% 0.01W 0402
3351	4822 117 13548	1kΩ 5% 0402
3352	3198 031 04730	47Ω 5% 0402
3353	4822 117 13606	10kΩ 5% 0.01W 0402
3354	4822 117 13606	10kΩ 5% 0.01W 0402
3355	4822 117 13601	22kΩ 5% 0402
3356	3198 031 08210	820Ω 5% 0,5W
3357	4822 117 13601	22kΩ 5% 0402
3358	5322 117 11726	10Ω 5%
3361	4822 117 13605	Jumper 0402
3364	2322 705 70124	120kΩ 5% 0402
3365	4822 117 13605	Jumper 0402
3366	4822 117 13602	2.2kΩ 5% 0.01W 0402
3367	4822 117 13548	1kΩ 5% 0402
3368	3198 031 06830	68kΩ 5% 0.01W 0402
3371	4822 117 13548	1kΩ 5% 0402
3372	2322 705 70155	1.5MΩ 5% 0402
3373	4822 117 13606	10kΩ 5% 0.01W 0402
3374	3198 031 02720	2.7kΩ 5% 0.01W 0402
3375	3198 031 02720	2.7kΩ 5% 0.01W 0402
3376	4822 117 13606	10kΩ 5% 0.01W 0402
3377	3198 031 02250	2.2MΩ 5% 0402
3378	3198 031 03340	330kΩ 5% 0402
3380	4822 117 13606	10kΩ 5% 0.01W 0402
3382	4822 117 13548	1kΩ 5% 0402
3384	4822 117 13606	10kΩ 5% 0.01W 0402
3385	3198 031 04730	47Ω 5% 0402
3386	3198 031 02730	27kΩ 5% 0402
3390	4822 117 13548	1kΩ 5% 0402
3391	3198 031 03930	39kΩ 5% 0402
3392	3198 031 04730	47Ω 5% 0402
3393	3198 031 03320	3.3kΩ 5% 0402
3395	4822 117 13606	10kΩ 5% 0.01W 0402
3396	4822 117 13543	470Ω 5% 0402
3397	4822 117 13543	470Ω 5% 0402
3398	4822 117 13545	100Ω 1% 0402
3445	3198 031 04730	47Ω 5% 0402
3446	3198 031 05630	56kΩ 5% 0402
3447	3198 031 05630	56kΩ 5% 0402
3448	3198 031 01220	1K2 5% 0402
3449	3198 031 01520	1.2kΩ 5% 0.01W 0402
3450	3198 031 01220	1K2 5% 0402
3452	3198 031 01220	1K2 5% 0402
3453	3198 031 04730	47Ω 5% 0402
3454	3198 031 05630	56kΩ 5% 0402
3455	3198 031 05630	56kΩ 5% 0402
3456	3198 031 01220	1K2 5% 0402

3457	3198 031 01520	1.2kΩ 5% 0.01W 0402
3480	3198 031 02720	2.7kΩ 5% 0.01W 0402
3481	3198 031 02720	2.7kΩ 5% 0.01W 0402
3482	3198 031 04720	4.7kΩ 5% 0402
3483	3198 031 08220	8.2kΩ 5% 0.5W
3484	3198 031 04720	4.7kΩ 5% 0402
3485	3198 031 08220	8.2kΩ 5% 0.5W
3501	4822 117 13606	10kΩ 5% 0.01W 0402
3502	4822 117 13606	10kΩ 5% 0.01W 0402
3503	4822 117 13606	10kΩ 5% 0.01W 0402
3504	4822 117 13606	10kΩ 5% 0.01W 0402
3507	4822 117 13606	10kΩ 5% 0.01W 0402
3508	3198 031 04720	4.7kΩ 5% 0402
3509	3198 031 02720	2.7kΩ 5% 0.01W 0402
3510	3198 031 02720	2.7kΩ 5% 0.01W 0402
3511	4822 117 13546	47Ω 5% 0402
3512	4822 117 13546	47Ω 5% 0402
3513	3198 031 02720	2.7kΩ 5% 0.01W 0402
3515	3198 031 02720	2.7kΩ 5% 0.01W 0402
3518	4822 117 13601	22kΩ 5% 0402
3523	4822 117 13606	10kΩ 5% 0.01W 0402
3530	4822 117 11297	100kΩ 5% 0.1W
3547	3198 031 03390	33Ω 1% 0402
3550	3198 031 04720	4.7kΩ 5% 0402
3557	4822 117 13546	47Ω 5% 0402
3563	4822 117 13606	10kΩ 5% 0.01W 0402
3564	4822 117 13606	10kΩ 5% 0.01W 0402
3565	4822 117 13606	10kΩ 5% 0.01W 0402
3570	4822 117 13602	2.2kΩ 5% 0.01W 0402
3571	3198 031 02720	2.7kΩ 5% 0.01W 0402
3572	4822 117 13606	10kΩ 5% 0.01W 0402
3581	4822 117 13545	100Ω 1% 0402
3582	4822 117 13606	10kΩ 5% 0.01W 0402
3583	3198 031 01830	18kΩ 5% 0.01W 0402
3586	4822 117 13601	22kΩ 5% 0402
3590	4822 117 13548	1kΩ 5% 0402
3651	5322 117 13036	1.2kΩ 1% 0.063W 0603
3652	5322 117 13052	2.7kΩ 1% 0.063W 0603
3737	3198 031 03390	33Ω 1% 0402
3904	4822 117 13605	Jumper 0402
3909	4822 117 13545	100Ω 1% 0402
3911	4822 117 13545	100Ω 1% 0402
3918	4822 117 13545	100Ω 1% 0402
3919	4822 117 13545	100Ω 1% 0402
3928	4822 117 13545	100Ω 1% 0402
3929	4822 117 13545	100Ω 1% 0402
3936	4822 117 13545	100Ω 1% 0402
3938	4822 117 13545	100Ω 1% 0402
3950	4822 117 13545	100Ω 1% 0402
3951	4822 117 13545	100Ω 1% 0402
3962	4822 117 13545	100Ω 1% 0402
3963	4822 117 13545	100Ω 1% 0402
3964	4822 117 13545	100Ω 1% 0402
3975	4822 117 13545	100Ω 1% 0402
3976	4822 117 13545	100Ω 1% 0402
3977	4822 117 13545	100Ω 1% 0402
3978	4822 117 13545	100Ω 1% 0402
3979	4822 117 13545	100Ω 1% 0402
3980	4822 117 13545	100Ω 1% 0402
4xxx	4822 117 13605	Jumper 0402

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5060	2422 549 44197	Bead 220Ω at 100MHz
5061	2422 549 44197	Bead 220Ω at 100MHz
5062	2422 549 44197	Bead 220Ω at 100MHz
5063	2422 549 44197	Bead 220Ω at 100MHz
5101	4822 157 71303	0.39µH 10% 0805
5102	2422 549 44197	Bead 220Ω at 100MHz
5112	2422 549 44197	Bead 220Ω at 100MHz
5134	2422 549 44197	Bead 220Ω at 100MHz
5135	2422 549 44197	Bead 220Ω at 100MHz
5150	2422 549 44197	Bead 220Ω at 100MHz
5151	2422 549 44197	Bead 220Ω at 100MHz
5152	2422 549 44197	Bead 220Ω at 100MHz
5281	2422 549 44197	Bead 220Ω at 100MHz
5282	2422 549 44197	Bead 220Ω at 100MHz
5283	2422 549 44197	Bead 220Ω at 100MHz
5285	2422 549 44197	Bead 220Ω at 100MHz
5300	2422 549 44197	Bead 220Ω at 100MHz
5307	4822 051 20008	Jumper 0805
5317	4822 051 20008	Jumper 0805
5327	4822 051 20008	Jumper 0805
5328	4822 051 20008	Jumper 0805
5342	2422 549 44197	Bead 220Ω at 100MHz
5343	2422 549 44197	Bead 220Ω at 100MHz
5344	2422 549 44197	Bead 220Ω at 100MHz
5345	2422 549 44197	Bead 220Ω at 100MHz
5450	2422 549 44197	Bead 220Ω at 100MHz
5452	2422 549 44197	Bead 220Ω at 100MHz
5480	2422 549 44197	Bead 220Ω at 100MHz
5570	2422 549 44197	Bead 220Ω at 100MHz
5583	2422 549 44197	Bead 220Ω at 100MHz

5600	4822 157 11716	Bead 30Ω at 100MHz
5601	2422 549 44197	Bead 220Ω at 100MHz
5651	2422 535 94134	10µH 20% 0805
5654	4822 157 11258	1µH 20% NLC322522T
5659	4822 157 71334	0.68µH
5730	2422 549 44197	Bead 220Ω at 100MHz
5731	2422 549 44197	Bead 220Ω at 100MHz
5792	2422 549 44197	Bead 220Ω at 100MHz

-▷|-

6101	4822 130 11525	1SS356
6301	4822 130 11397	BAS316
6327	9322 102 64685	UDZ2.7B
6341	4822 130 11397	BAS316
6353	5322 130 34337	BAV99
6365	5322 130 34337	BAV99
6367	9340 548 67115	PDZ22B
6368	4822 130 11397	BAS316
6381	5322 130 34337	BAV99
6382	4822 130 11594	BZX284-C47
6384	9340 548 67115	PDZ22B
6385	4822 130 11397	BAS316
6397	9340 548 69115	PDZ27B
6398	4822 130 11397	BAS316
6480	9340 548 61115	PDZ12B
6481	9340 548 61115	PDZ12B
6651	9322 128 70685	SMSS14

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7060	9340 425 30115	BC847BPN
7062	4822 130 60373	BC856B
7063	4822 130 60373	BC856B
7100	9352 712 54557	PNX3000HL/N1
7101	3198 010 42310	BC847BW
7150	9340 425 20115	BC847BS
7300	9352 735 54557	PNX3002E/N302
7301	4822 130 60373	BC856B
7302	4822 130 60373	BC856B
7303	4822 130 60373	BC856B
7304	3198 010 42310	BC847BW
7310	9340 425 30115	BC847BPN
7320	9340 425 30115	BC847BPN
7330	9340 425 30115	BC847BPN
7346	4822 130 60373	BC856B
7356	4822 130 60373	BC856B
7365	5322 130 60159	BC846B
7382	4822 130 60373	BC856B
7383	9340 425 30115	BC847BPN
7393	3198 010 42310	BC847BW
7432	9340 425 30115	BC847BPN
7433	9340 425 30115	BC847BPN
7480	4822 209 33165	TDA1308T/N1
7525	9322 130 41668	M24C64-WMN6
7581	9352 691 56115	NE56610-45GW
7650	9322 170 61668	CS51033YDR8
7651	9322 170 87668	STS5PF30L
7730	9322 180 88668	K4S641632F-TC75
7790	9322 199 76668	M58LW032C90N1

Side I/O Panel [D]

Various

0240	2422 025 12485	Connector 11p m
0241	4822 267 10734	Connector 5p m
0242	4822 267 10734	Connector 5p m
1254	4822 267 31014	Socket headphone
1255	4822 265 11606	Connector 3p
1256	2422 026 04926	Socket SVHS 4p f

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2286	4822 122 33642	150pF 5% 50V
2288	4822 122 33642	150pF 5% 50V
2292	5322 122 32311	470pF 10% 100V
2294	5322 122 32311	470pF 10% 100V
2296	4822 122 30103	22nF 80% 63V
2297	4822 122 30103	22nF 80% 63V

-WW-

3285	4822 116 52201	75Ω 5% 0.5W
3286	4822 116 52176	10Ω 5% 0.5W
3287	4822 116 52201	75Ω 5% 0.5W
3288	4822 116 52176	10Ω 5% 0.5W
3289	4822 116 52249	1.8kΩ 5% 0.5W
3291	4822 050 11002	1kΩ 1% 0.4W
3292	4822 117 10834	47kΩ 1% 0.1W
3293	4822 050 11002	1kΩ 1% 0.4W
3294	4822 117 10834	47kΩ 1% 0.1W
3295	4822 116 52276	3.9kΩ 5% 0.5W
3296	4822 117 10833	10kΩ 1% 0.1W
3297	4822 117 10833	10kΩ 1% 0.1W
4xxx	4822 051 20008	Jumper 0805

-▷|-

6291	9340 548 61115	PDZ12B
6292	9340 548 61115	PDZ12B
6293	9340 548 61115	PDZ12B
6294	9340 548 61115	PDZ12B
6296	9340 548 61115	PDZ12B
6297	9340 548 61115	PDZ12B

Top Control Panel [E]

Various

0135	3104 311 04671	Cable 3p/1200/3p
0215	2422 025 16601	Connector 3p m
1091	4822 276 13775	Switch
1092	4822 276 13775	Switch
1093	4822 276 13775	Switch
1094	4822 276 13775	Switch

-||-

2010	4822 122 33177	10nF 20% 50V

-WW-

3088	4822 051 30008	Jumper 0603
3089	4822 051 30008	Jumper 0603
3091	4822 051 30561	560Ω 5% 0.062W
3092	4822 051 30391	390Ω 5% 0.062W
3093	4822 051 30561	560Ω 5% 0.062W
3094	4822 051 30271	270Ω 5% 0.062W
3095	4822 051 30332	3.3kΩ 5% 0.062W
3096	4822 051 30152	1.5kΩ 5% 0.062W
4092	4822 051 30008	Jumper 0603

-▷|-

6092	4822 130 10654	BAT254

CRT Panel [F]

Various

0032	4822 492 70788	IC clamp
1298	2422 500 80063	Connector CRT 10p f
1424	2422 025 11244	Connector 7p m
1434	4822 267 10973	Connector 1p m
1483	4822 267 10735	Connector 3p m
1940	2422 025 12485	Connector 11p m
8483	3104 311 03111	Cable 3p/340/3p ferrite

-||-

2300	4822 124 40764	22µF 100 V
2301	4822 124 40196	220µF 20% 16V
2304	4822 121 41856	22nF 5% 250V
2306	2238 586 59812	100nF 20-80% 50V 0603
2307	4822 121 41856	22nF 5% 250V
2309	3198 017 42230	22nF 50V
2313	4822 124 12373	47µF 20% 250V
2315	5322 126 11583	10nF 10% 50V 0603
2316	4822 121 40518	100nF 10% 250V
2318	5322 122 32654	22nF 10% 63V
2319	4822 122 30043	10nF 80% 63V
2320	2238 586 59812	100nF 20-80% 50V 0603
2324	5322 121 44356	4.7nF 5% 2kV
2325	2238 586 59812	100nF 20-80% 50V 0603
2330	4822 126 13879	220nF 20% 16V
2338	2238 786 19856	330nF 16V 0603
2409	4822 051 30008	Jumper 0603
2410	3198 017 44740	470nF 10V 0603
2411	4822 126 14585	100nF 10% 50V
2420	4822 051 30008	Jumper 0603

-WW-

3300	4822 052 10109	10Ω 5% 0.33W
3301	4822 053 12103	10K00 5% 3W
3302	4822 051 30681	680Ω 5% 0.062W

3303	4822 051 30682	6.8kΩ 5% 0.062W
3304	4822 051 10102	1kΩ 2% 0.25W
3306	4822 117 13608	4.7Ω 5% 0603 0.62W
3307	4822 051 30109	10Ω 5% 0.062W
3308	4822 051 30563	56kΩ 5% 0.062W
3310	4822 051 10102	1kΩ 2% 0.25W
3311	4822 051 30181	180Ω 5% 0.062W
3312	4822 051 30222	2.2kΩ 5% 0.062W
3316	4822 051 30563	56kΩ 5% 0.062W
3318	4822 117 12971	15Ω 5% 0.62W 0603
3319	4822 051 30102	1kΩ 5% 0.062W
3323	4822 050 24708	4.7Ω 1% 0.6W
3324	4822 051 30221	220Ω 5% 0.062W
3329	4822 050 24708	4.7Ω 1% 0.6W
3334	4822 050 11002	1kΩ 1% 0.4W
3335	4822 051 30271	270Ω 5% 0.062W
3336	4822 051 30271	270Ω 5% 0.062W
3337	4822 051 30271	270Ω 5% 0.062W
3338	3198 013 01020	1kΩ 2% 0.5W
3339	3198 013 01020	1kΩ 2% 0.5W
3340	3198 013 01020	1kΩ 2% 0.5W
3341	2306 207 03151	150Ω 5% 0.5W
3342	4822 116 83883	470Ω 5% 0.5W
3345	4822 116 52191	33Ω 5% 0.5W
3347	3198 013 01520	1.5kΩ 2% 0.5W
3349	3198 013 01020	1kΩ 2% 0.5W
3350	4822 116 83883	470Ω 5% 0.5W
3351	4822 116 83883	470Ω 5% 0.5W
3352	4822 116 83883	470Ω 5% 0.5W
3354	4822 051 30222	2.2kΩ 5% 0.062W
3355	4822 117 13608	4.7Ω 5% 0603 0.62W
3356	4822 051 10102	1kΩ 2% 0.25W
3357	4822 117 13608	4.7Ω 5% 0603 0.62W
3370	4822 117 13016	VDR 1mA/50V
3371	4822 051 30472	4.7kΩ 5% 0.062W
3401	4822 116 52175	100Ω 5% 0.5W
3403	4822 052 11228	2R20 5% 0,5W
3404	4822 052 11228	2R20 5% 0,5W
3410	4822 051 30103	10kΩ 5% 0.062W
3411	4822 051 30103	10kΩ 5% 0.062W
3412	2322 750 61509	15Ω 5% 1206 fusible
3413	4822 051 30181	180Ω 5% 0.062W
3414	4822 051 30109	10Ω 5% 0.062W
3417	4822 051 30109	10Ω 5% 0.062W
3418	4822 051 30181	180Ω 5% 0.062W
3420	4822 051 30008	Jumper 0603
3427	4822 051 30008	Jumper 0603
3999	4822 051 30152	1.5kΩ 5% 0.062W
9402	4822 051 20008	Jumper 0805
9405	4822 051 30008	Jumper 0603

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5300	3104 308 20571	Transf. S13974-03
5400	4822 157 11869	33µH 10%
5401	4822 157 71334	0.68µH

→⊢

6300	4822 130 83757	BAS216
6301	4822 051 20008	Jumper 0805
6305	9340 553 52115	BAS321
6306	9340 553 52115	BAS321
6307	9340 553 52115	BAS321
6310	4822 130 11397	BAS316
6311	4822 130 11397	BAS316
6312	4822 130 11397	BAS316
6313	4822 130 11397	BAS316
6314	4822 130 11397	BAS316

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7300	5322 130 42718	BFS20
7301	5322 130 42718	BFS20
7302	5322 130 62804	BCP53
7303	5322 130 63033	BCP56
7304	4822 130 60383	BF824
7307	9352 561 40112	TDA6108
7308	5322 130 60159	BC846B

DC Shift Panel [G]

Various

0317	4822 265 20723	Connector 2p m
0318	4822 265 20723	Connector 2p m
1430	2422 086 10581	Fuse 400mA 65V
8317	3104 311 01421	Cable 2p3/220/2p3 Wh

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2430	4822 122 31177	470pF 10% 500V
2431	4822 122 31177	470pF 10% 500V

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5430	3128 138 38911	DC-shift coil CU15

→⊢

6432	9340 317 00133	BYD33V
6433	9340 317 00133	BYD33V

DAF + 2nd order [I]

Various

0034	3104 304 23041	DAF bracket EMGS
1417	4822 265 20723	Connector 2p m
1418	2422 025 16374	Connector 2p m
1419	4822 265 20723	Connector 2p m
1497	4822 267 10973	Connector 1p m
8418	3104 311 01951	Cable 2p3/560/2p4 Bk

⊣⊢

2800	2222 375 90498	470pF 5% 2kV
2821	2222 479 90166	68nF 5% 400V
2890	2222 375 90276	220pF 5% 2kV

-WW-

3898	4822 116 21211	VDR 420V
3899	4822 116 21211	VDR 420V

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5800	2422 531 02437	Transformer S21975-03
5801	2422 531 02435	Transformer C948-02
5801	8228 001 34391	Driver Transformer CU15

Front Interface Panel [J]

Various

0157	3104 311 02421	Cable 5p/480/5p
0177	3104 311 03011	Cable 2p/340/2p Bk
0201	2422 025 16268	Connector 2p m
0202	2422 025 16268	Connector 2p m
0203	2422 025 06353	Connector 5p m
1910	9322 127 54667	TSOP1836UH1
1951	2422 128 02972	Mains switch

⊣⊢

2930	4822 124 41584	100µF 20% 10V

-WW-

3957	4822 053 21335	3.3MΩ 5% 0.5W
3966	4822 053 21335	3.3MΩ 5% 0.5W
3978	4822 051 30008	Jumper 0603
3981	4822 051 30681	680Ω 5% 0.062W
3982	4822 116 52219	330Ω 5% 0.5W
4903	4822 051 30008	Jumper 0603

→⊢

6901	9322 050 99682	LTL-10224WHCR

11. Revision List

First release

Colour Television
2004-4 (Year Book)

Service
Service
Service

Product Survey

Remarks:

Each year 4 Product Surveys are published. From Product Survey 2004-1 onwards the contents of the second, the third and the fourth issue is an updating of the previous one; so e.g. Product Survey 2004-2 replaces 2004-1, Product Survey 2004-3 replaces Product Survey's 2004-1 and 2004-2 and the year book Product Survey 2004-4 replaces the Product Survey's 2004-1, 2004-2 and 2004-3.

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Safety regulations require that the set is restored to its original condition and that parts which are identical with those specified are used.

Les normes de sécurité exigent que l'appareil soit remis à l'état d'origine et que soient utilisées les pièces de rechange identiques à celles spécifiées.

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Publication Survey

SERVICE MANUAL	LANGUAGE	CODE NUMBER
SM A02E AA	GB	3122 785 13950

SERVICE MANUAL	LANGUAGE	CODE NUMBER
SM A02U AA	GB	3122 785 13980

SERVICE MANUAL	LANGUAGE	CODE NUMBER
SM A10E BB (iDTV / IBO+, MHEG)	GB	3122 785 13940

SERVICE MANUAL	LANGUAGE	CODE NUMBER
SM DPTV320 / DPTV325	GB	3122 785 13060
SM DPTV355	GB	3122 785 14410

SERVICE MANUAL	LANGUAGE	CODE NUMBER
SM DPTV465 AA (regio AP)	GB	3122 785 15001

SERVICE MANUAL	LANGUAGE	CODE NUMBER
SM DPTV475 AA (regio AP)	GB	3122 785 15010

SERVICE MANUAL	LANGUAGE	CODE NUMBER
SM EM1.1A AA	GB	3122 785 13871

SERVICE MANUAL	LANGUAGE	CODE NUMBER
SM EM1.1U AA	GB	3122 785 13850

SERVICE MANUAL	LANGUAGE	CODE NUMBER
SM EM1.2A AA	GB	3122 785 13880

SERVICE MANUAL	LANGUAGE	CODE NUMBER
SM EM1.2U AA	GB	3122 785 13860

SERVICE MANUAL	LANGUAGE	CODE NUMBER
SM EM2E AA	GB	3122 785 10310
SM EM2E AA	NL	3122 785 10320
SM EM2E AA	D	3122 785 10330
SM EM2E AA	F	3122 785 10340
SM EM2E AA	I	3122 785 10350
SM EM2E AA	E	3122 785 10360

SERVICE INFORMATION	LANGUAGE	CODE NUMBER
SI EM2E AA 00.01	ALL	3122 785 40190
SI EM2E AA 00.02	ALL	3122 785 40290
SI EM2E AA 01.01	ALL	3122 785 40310
SI EM2E AA 02.01	ALL	3122 785 40590
SI EM2E AA 02.02	GB/ALL	3122 785 40640

SERVICE MANUAL	LANGUAGE	CODE NUMBER
SM EM3E AA	GB	3122 785 11360
SM EM3E AA	D	3122 785 11370
SM EM3E AA	F	3122 785 11380
SM EM3E AA	I	3122 785 11390
SM EM3E AA	E	3122 785 11400

SERVICE INFORMATION	LANGUAGE	CODE NUMBER
SI EM3E AA 02.01	ALL	3122 785 40600

SERVICE MANUAL	LANGUAGE	CODE NUMBER
SM EM5.1E AA	GB	3122 785 13420

SERVICE MANUAL	LANGUAGE	CODE NUMBER
SM EM5.2E AA	GB	3122 785 14590

SERVICE MANUAL	LANGUAGE	CODE NUMBER
SM EM5.3A P/M AA	GB	3122 785 14610

SERVICE MANUAL	LANGUAGE	CODE NUMBER
SM EM5.3E AA	GB	3122 785 14600

SERVICE MANUAL	LANGUAGE	CODE NUMBER
SM EM5A NTSC AA	GB	3122 785 12620
SM EM5A P/M AA	GB	3122 785 12611

SERVICE MANUAL	LANGUAGE	CODE NUMBER
SM EM5E AA	D	3122 785 12571
SM EM5E AA	F	3122 785 12581
SM EM5E AA	GB	3122 785 12561

SERVICE MANUAL	LANGUAGE	CODE NUMBER
SM EM5E-DVD AA Supplement	GB	3122 785 12890
SM EM5E-DVD AA Supplement	D	3122 785 12900
SM EM5E-DVD AA Supplement	F	3122 785 12910

SERVICE MANUAL	LANGUAGE	CODE NUMBER
SM EM5L AA	GB	3122 785 13260

SERVICE MANUAL	LANGUAGE	CODE NUMBER
SM EM6E AA	GB	3122 785 13070
SM EM6E AA (update + HDD module)	GB	3122 785 13071
SM EM6E AB (previously EM6E-Tech AA)	GB	3122 785 13100

SERVICE MANUAL	LANGUAGE	CODE NUMBER
SM EM8E AA	GB	3122 785 14780

SERVICE MANUAL	LANGUAGE	CODE NUMBER
SM F21RE AA	GB	3122 785 11410
SM F21RE AA	I	3122 785 11440

SERVICE INFORMATION	LANGUAGE	CODE NUMBER
SI F21RE AA 02.01	GB,D,F	3122 785 40720

SERVICE MANUAL	LANGUAGE	CODE NUMBER
SM F21RE AB (EU and AP version)	GB	3122 785 13130

SERVICE MANUAL	LANGUAGE	CODE NUMBER
SM F21RU AA	GB	3122 785 12630
SM F21RU AB	GB	3122 785 13160

SERVICE MANUAL	LANGUAGE	CODE NUMBER
SM F22RE AA (EU and AP ver Sion)	GB	3122 785 13171

SERVICE MANUAL	LANGUAGE	CODE NUMBER
SM F22RU AA	GB	3122 785 13200

SERVICE MANUAL	LANGUAGE	CODE NUMBER
SM FM23 AA	GB	3122 785 11300
SM FM23 AA	I	3122 785 11330

SERVICE MANUAL	LANGUAGE	CODE NUMBER
SM FM23 AB	GB	3122 785 12790

SERVICE MANUAL	LANGUAGE	CODE NUMBER
SM FM24 AA	GB	3122 785 12770
SM FM24 AA	I	3122 785 12780

SERVICE INFORMATION	LANGUAGE	CODE NUMBER
SI FM24 AA 02.01	GB	3122 785 40680
SI FM24 AA 02.01	GB	3122 785 40681

SERVICE MANUAL	LANGUAGE	CODE NUMBER
SM FM242 AA	GB	3122 785 13400
SM FM242 AB	GB	3122 785 14130

SERVICE MANUAL	LANGUAGE	CODE NUMBER
SM FM33 AA	GB	3122 785 13891

SERVICE MANUAL	LANGUAGE	CODE NUMBER
SM FTL13E AA	GB	3122 785 13450
SM FTL13E AA (update not release to regions)	GB	3122 785 13451
SM FTL13E AA (update + ITV added)	GB	3122 785 13452
SM FTL13E AA & FTL13E AB (update + AB added)	GB	3122 785 13453

SERVICE MANUAL	LANGUAGE	CODE NUMBER
SM FTL13U AA	GB	3122 785 13480
SM FTL13U AA & FTL13U AB (update + AB added)	GB	3122 785 13481

SERVICE MANUAL	LANGUAGE	CODE NUMBER
SM FTL2.1A AA & FTL2.2A AA	GB	3122 785 14640

SERVICE MANUAL	LANGUAGE	CODE NUMBER
SM FTL2.1E AA	GB	3122 785 14620

SERVICE MANUAL	LANGUAGE	CODE NUMBER
SM FTL2.1U AA & FTL2.2U AA	GB	3122 785 14632

SERVICE MANUAL	LANGUAGE	CODE NUMBER
SM FTL2.2^{E} AA	GB	3122 785 15240

SERVICE MANUAL	LANGUAGE	CODE NUMBER
SM FTL3.1E AA	GB	3122 785 14700

SERVICE MANUAL	LANGUAGE	CODE NUMBER
SM FTP1.1E AA	GB	3122 785 14370

SERVICE MANUAL	LANGUAGE	CODE NUMBER
SM FTP1.1E AA	GB	3122 785 14370

SERVICE MANUAL	LANGUAGE	CODE NUMBER
SM FTP1.1U AA	GB	3122 785 14381

SERVICE MANUAL	LANGUAGE	CODE NUMBER
SM FTP2.2A AA	GB	3122 785 14680

SERVICE MANUAL	LANGUAGE	CODE NUMBER
SM FTP2.2E AA	GB	3122 785 14650

SERVICE MANUAL	LANGUAGE	CODE NUMBER
SM FTP2.2L AA	GB	3122 785 15231

SERVICE MANUAL	LANGUAGE	CODE NUMBER
SM FTP2.2U AA	GB	3122 785 14662

SERVICE MANUAL	LANGUAGE	CODE NUMBER
SM L01.1A AA (Lage Screen)	GB	3122 785 11121

SERVICE MANUAL	LANGUAGE	CODE NUMBER
SM L01.1A AB	GB	3122 785 12730

SERVICE MANUAL	LANGUAGE	CODE NUMBER
SM L01.1A AC	GB	3122 785 13210

SERVICE MANUAL	LANGUAGE	CODE NUMBER
SM L01.1E AA (Large Screen)	GB	3122 785 11111
SM L01.1E AA (Lage Screen)	D	3122 785 11700
SM L01.1E AA (Lage Screen)	F	3122 785 11710
SM L01.1E AA (Lage Screen)	I	3122 785 11720
SM L01.1E AA (Lage Screen)	E	3122 785 11730

SERVICE MANUAL	LANGUAGE	CODE NUMBER
SM L01.1E AB (DVD Supplement)	GB	3122 785 12830
SM L01.1E AB (DVD Supplement)	D	3122 785 12840
SM L01.1E AB (DVD Supplement)	F	3122 785 12850

SERVICE MANUAL	LANGUAGE	CODE NUMBER
SM L01.1E AB	GB	3122 785 12860
SM L01.1E AB	D	3122 785 12870
SM L01.1E AB	F	3122 785 12880

SERVICE MANUAL	LANGUAGE	CODE NUMBER
SM L01.1L AA (Large Screen)	GB	3122 785 11140
SM L01.1L AA (Large Screen)	E	3122 785 11791
SM L01.1L AA (Large Screen)	Br/Por	3122 785 11811

SERVICE MANUAL	LANGUAGE	CODE NUMBER
SM L01.1L AA / L01.2L AA Supplement L01H.1L AA / L01H.2L AA	GB	3122 785 11980
SM L01.1L AA / L01.2L AA Supplement L01H.1L AA / L01H.2L AA	E	3122 785 11990
SM L01.1L AA / L01.2L AA Supplement L01H.1L AA / L01H.2L AA	Br/Por	3122 785 12000

SERVICE MANUAL	LANGUAGE	CODE NUMBER
SM L01.1L AB	E	3122 785 12690
SM L01.1L AB	Br/Por	3122 785 12701

SERVICE MANUAL	LANGUAGE	CODE NUMBER
SM L01.1L AC	GB	3122 785 13230
SM L01.1L AC	E	3122 785 13250
SM L01.1L AC	Br/Por	3122 785 13240

SERVICE MANUAL	LANGUAGE	CODE NUMBER
SM L01.1U AA (Large Screen, USA: 8)	GB	3122 785 11170

SERVICE MANUAL	LANGUAGE	CODE NUMBER
SM L01.1U AB (T8 AA)	GB	3122 785 12740

SERVICE MANUAL	LANGUAGE	CODE NUMBER
SM L01.1U AC	GB	3122 785 13220
SM L01.1U AC (SM Update with SD5.12 DVD Module)	GB	3122 785 13221

SERVICE MANUAL	LANGUAGE	CODE NUMBER
SM L01.2A AA (SMall Screen)	GB	3122 785 11160

SERVICE MANUAL	LANGUAGE	CODE NUMBER
SM L01.2A AB	GB	3122 785 12750

SERVICE INFORMATION	LANGUAGE	CODE NUMBER
SI L01.2A AB 02.01 / L01.2L AB 02.01	GB	3122 785 40730

SERVICE MANUAL	LANGUAGE	CODE NUMBER
SM L01.2E AA (Small Screen)	GB	3122 785 11151
SM L01.2E AA (Small Screen)	D	3122 785 11740
SM L01.2E AA (Small Screen)	F	3122 785 11750
SM L01.2E AA (Small Screen)	I	3122 785 11760
SM L01.2E AA (Small Screen)	E	3122 785 11770

SERVICE INFORMATION	LANGUAGE	CODE NUMBER
SI L01.2E AA 02.01	ALL	3122 785 40620

SERVICE MANUAL	LANGUAGE	CODE NUMBER
SM L01.2L AA (Small Screen)	GB	3122 785 11180
SM L01.2L AA (Small Screen)	E	3122 785 11800
SM L01.2L AA (Small Screen)	Br/Por	3122 785 11820

SERVICE MANUAL	LANGUAGE	CODE NUMBER
SM L01.2L AB	E	3122 785 12710
SM L01.2L AB	Br/Por	3122 785 12721

SERVICE MANUAL	LANGUAGE	CODE NUMBER
SM L01.2U AA (Small Screen, USA: L8)	GB	3122 785 11130

SERVICE MANUAL	LANGUAGE	CODE NUMBER
SM L01.2U AB (S8 AA)	GB	3122 785 12760

SERVICE INFORMATION	LANGUAGE	CODE NUMBER
SI L01H.1A AA	GB	3122 785 40420
SI L01H.1A/L01H.2A 03.01 new intf.panel	GB	3122 785 40770

SERVICE MANUAL	LANGUAGE	CODE NUMBER
SM L01H.1E AA	GB	3122 785 11630
SM L01H.1E AA	D	3122 785 12110
SM L01H.1E AA	F	3122 785 12120
SM L01H.1E AA	I	3122 785 12130
SM L01H.!E AA	E	3122 785 12140

SERVICE INFORMATION	LANGUAGE	CODE NUMBER
SI L01H.1E AA 02.01	GB,D,F	3122 785 40690

SERVICE INFORMATION	LANGUAGE	CODE NUMBER
SI L01H.1E/L01H.2E 02.02 new intf.panel	ALL	3122 785 40760

SERVICE MANUAL	LANGUAGE	CODE NUMBER
SM L01H.2A AA	GB	3122 785 11660

SERVICE MANUAL	LANGUAGE	CODE NUMBER
SM L01H.2E AA	GB	3122 785 11640
SM L01H.2E AA	D	3122 785 12150
SM L01H.2E AA	F	3122 785 12160
SM L01H.2E AA	I	3122 785 12170
SM L01H.2E AA	E	3122 785 12180

SERVICE MANUAL	LANGUAGE	CODE NUMBER
SM L03.1L AA	GB	3122 785 13900

SERVICE MANUAL	LANGUAGE	CODE NUMBER
SM L03.1U AA	GB	3122 785 13930

SERVICE MANUAL	LANGUAGE	CODE NUMBER
SM L03.2U AA	GB	3122 785 14560

SERVICE MANUAL	LANGUAGE	CODE NUMBER
SM L04A AA	GB	3122 785 14470
SM L04A AB	GB	3122 785 14770

SERVICE MANUAL	LANGUAGE	CODE NUMBER
SM L04E AA	GB	3122 785 14480
SM L04E AB	GB	3122 785 14970

SERVICE MANUAL	LANGUAGE	CODE NUMBER
SM L04L AA	GB	3122 785 14440

SERVICE MANUAL	LANGUAGE	CODE NUMBER
SM L04U AA	GB	3122 785 14430

SERVICE MANUAL	LANGUAGE	CODE NUMBER
SM L04HE AA	GB	3122 785 14820

SERVICE MANUAL	LANGUAGE	CODE NUMBER
SM L04HU AA	GB	3122 785 14840

SERVICE MANUAL	LANGUAGE	CODE NUMBER
SM LC03A AA (service info update 23")	GB	3122 785 13601

SERVICE MANUAL	LANGUAGE	CODE NUMBER
SM LC03E AA	D	3122 785 13580
SM LC03E AA	F	3122 785 13590
SM LC03E AA (service info update 23")	GB	3122 785 13571

SERVICE MANUAL	LANGUAGE	CODE NUMBER
SM LC03L AA	GB	3122 785 13620
SM LC03L AA	E	3122 785 13640
SM LC03L AA	Br/Por	3122 785 13630

SERVICE MANUAL	LANGUAGE	CODE NUMBER
SM LC03U AA (service info update 23")	GB	3122 785 13611

SERVICE MANUAL	LANGUAGE	CODE NUMBER
SM LC13A AA	GB	3122 785 14070

SERVICE MANUAL	LANGUAGE	CODE NUMBER
SM LC13E AA	GB	3122 785 14030

SERVICE MANUAL	LANGUAGE	CODE NUMBER
SM LC13U AA	GB	3122 785 14060

SERVICE MANUAL	LANGUAGE	CODE NUMBER
SM LC4.1A AA	GB	3122 785 14540

SERVICE MANUAL	LANGUAGE	CODE NUMBER
SM LC4.1E AA	GB	3122 785 14520

SERVICE MANUAL	LANGUAGE	CODE NUMBER
SM LC4.1L AA	GB	3122 785 14530

SERVICE MANUAL	LANGUAGE	CODE NUMBER
SM LC4.1U AA	GB	3122 785 14530

SERVICE MANUAL	LANGUAGE	CODE NUMBER
SM LC4.2A AA	GB	3122 785 14510

SERVICE MANUAL	LANGUAGE	CODE NUMBER
SM LC4.2E AA	GB	3122 785 14491

SERVICE MANUAL	LANGUAGE	CODE NUMBER
SM LC4.2U AA	GB	3122 785 14500

SERVICE MANUAL	LANGUAGE	CODE NUMBER
SM LC4.6A AA	GB	3122 785 14751

SERVICE MANUAL	LANGUAGE	CODE NUMBER
SM LC4.6E AA	GB	3122 785 14710

SERVICE MANUAL	LANGUAGE	CODE NUMBER
SM LC4.6L AA	GB	3122 785 15180

SERVICE MANUAL	LANGUAGE	CODE NUMBER
SM LC4.6U AA	GB	3122 785 14732

SERVICE MANUAL	LANGUAGE	CODE NUMBER
SM LC4.7A AA	GB	3122 785 147961

SERVICE MANUAL	LANGUAGE	CODE NUMBER
SM LC4.7E AA	GB	3122 785 14721

SERVICE MANUAL	LANGUAGE	CODE NUMBER
SM LC4.7L AA	GB	3122 785 15190

SERVICE MANUAL	LANGUAGE	CODE NUMBER
SM LC4.7U AA	GB	3122 785 14741

SERVICE MANUAL	LANGUAGE	CODE NUMBER
SM LCD1.15E AA	GB	3122 785 12510

SERVICE MANUAL	LANGUAGE	CODE NUMBER
SM LCD1.20E AA	GB	3122 785 12520

SERVICE MANUAL	LANGUAGE	CODE NUMBER
SM T1.1A AA	GB	3122 785 13000

SERVICE MANUAL	LANGUAGE	CODE NUMBER
SM TE1.1E AA	GB	3122 785 13540
SM TE1.1E AA	D	3122 785 13550
SM TE1.1E AA	F	3122 785 13560

SERVICE MANUAL	LANGUAGE	CODE NUMBER
SM TC2.1A AA	GB	3122 785 13690
SM TC2.1A AB	GB	3122 785 14550

SERVICE MANUAL	LANGUAGE	CODE NUMBER
SM TC3.1U AA	GB	3122 785 14800

SERVICE MANUAL	LANGUAGE	CODE NUMBER
SM TC4.1U AA	GB	3122 785 14790

SERVICE MANUAL	LANGUAGE	CODE NUMBER
SM TDVD1.1E AA	GB	3122 785 12970
SM TDVD1.1E AA	D	3122 785 12980
SM TDVD1.1E AA	F	3122 785 12990

SERVICE MANUAL	LANGUAGE	CODE NUMBER
SM TDVD2.1E	GB	3122 785 14170

SERVICE MANUAL	LANGUAGE	CODE NUMBER
SM TDVD2.1E	GB	3122 785 14170

SERVICE MANUAL	LANGUAGE	CODE NUMBER
SM TE1.1E AA	GB	3122 785 13540
SM TE1.1E AA	D	3122 785 13550
SM TE1.1E AA	F	3122 785 13560

SERVICE MANUAL	LANGUAGE	CODE NUMBER
SM TE2.1E AA	GB	3122 785 14930

SERVICE MANUAL	LANGUAGE	CODE NUMBER
SM TF1.1E AA	GB	3122 785 15130

SERVICE MANUAL	LANGUAGE	CODE NUMBER
SM VGA PDP repair manual	GB	3122 785 14360

Remote Control Survey

RC TYPE	CODE NUMBER
06-015W30-A171X	996500023465
06-0R1735-H009X	996500022880
08-1465-RMY	996500014907
08-2165-RMY	996500015401
08-HS46F0-M133A	996500024266
M28-2	996500017920
RC11128/17	313923805781
RC1112917/17A	313923804701
RC1123507/00	631020092071
RC1553801/01	932220716667
RC1553802/01	312814715901
RC1553803/01	312814715921
RC1553805/01	313923808571
RC19036001/01	313922886491
RC19036002/01A	313923804313
RC19039001/01	313922886471
RC19041006/01	313923803811
RC19042001/01	313922886482
RC19042002/01	312814713341
RC19042007/01	312814714521
RC19042008/01	312814714871
RC19042009/01	312814714881
RC19042011/01	312814715231
RC19042013/01	631020092091
RC19042017/01	312814715351
RC19335003	313922886452
RC19335003/01	313922886452
RC19335004	313922886463
RC19335004/01	313922886463
RC19335014/01	313923805691
RC19335016/01	313923805851
RC19335019/01	313923808141
RC19335021/01	313923808161
RC2044/01	312814713651
RC2049/01B	312814713991
RC2060/01B	312814714011
RC2080	312814714861
RC2080/01	932215582667
RC25109/01	996500014330
RC2882/01	313922881973
RC4301/01	312814714411
RC4302/01	312814714431
RC4305/01	312814714461
RC4306/01B	312814716191
RC4307/01B	312814716201
RC4330/01	313923807441
RC4330/01H	313923807441
RC4332/01	312814715761
RC4333/01	313923807181
RC4334/01	313923807191
RC4335/01	313923807591
RC4337/01B	313923807921
RC4341/01B	313923810141
RC86702/01	313922889381
RC4330/01H	313923807441
RC19042008/01	312814714871
RC1553803/01	312814715921
RCLA014	313922886482
RCLA015	313912876471
RCLE011	313912876291
RCLE013A	631020092101
RCLE016	631020092051
RCLU012	313923804313
RCS82D	482221910548
SBHV00030A	310432700021
SBHV00032A	310432700031

Tuner Survey

TUNER TYPE	CODE NUMBER
07-457FR5-NX1	996500024347
CTT5020E/CFT5510	616800020001
ENV56D98G3	242254290108
ENV56K06G3	242254200007
ENV56K06G3	242254200007
TAFC-M130D	996500016507
TAFC-S120D	996500016521
TEDE9-031A	242254290072
TEDE9-200A	242254290106
TEDE9-201A	242254290107
TEDE9-228A	242254290122
TEDE9-228B	242254290122
TEDE9-286A	242254200003
TEDE-716A	242254200012
TEDE9-717A	242254200012
TEDE9X029A	242254290067
TEDE9X701A	242254290076
TEDE9X717A	242254200012
TEDH9-200A	242254290098
TEDH9-202A	242254290115
TEDH9-202A	242254290115
TEDH9-257A	242254200009
TEDH9-305A	242254290141
TEDH9-705A	242254200006
TEDH9X700A	242254290077
U1356A/A I G-3	313914716481
UR1316/A	313914719701
UR1316/A I -3	313914720751
UR1316/A I H-3	313914719701
UR1316R/A I -3	313914720751
UR1316R/A I H-3	313914719701
UR1316R/A I-3	313914717402
UR1336/A F	313914719711
UR1336/A F S H-3	313914719711
UR1336/A FI S H-3	313914722321
UV1316/A I X U-3	313914718851
UV1316E/A I-4	313914720911
UV1317/A I G-3	313914719171
UV1317/A I X U-3	313914719231
UV1318S/A I U-3	313914719361
UV1318S/A I-3	313914719341
UV1318S/A IH-3	313914719801
UV1318ST/AIH-3	313914720201
UR1336/A FI S H -3	313914722321
UV1338/A F S H-4	313914721461
UV1355-BK2	996500014970
UV1355C/A I B-3	996500022881
UV1356A/A I G-3	313914716481
UV1356A/A I G-3	313914716481
UV1356A/AIG-3	313914716481
UV1356E/A	313914721141
UVS1053-EW	996500023477

CRT Survey

RC TYPE	CODE NUMBER
37SX110Y22-DC05	996500014942
A33EKC02X01	070362110151
A34KPU02XXE6-N	996500023471
A36AKJ13X16	070306211300
A36AKJ15X07	932219116682
A51AEZ90X45	932220701682
A51AKL13X10	932220227682
A51AKL13X10N	932220229682
A51AKL13X10R	932220230682
A51ERF135X12	930192350301
A51ERF135X80	930190343301
A51ERF135X82	930190381329
A51JSY63X13	996500017980
A51KQK99X02	932220200682
A51KXR95X01	932215260682
A51LYZ095X01	932219608682
A51QAE320XA5	996500023503
A59EAK071X11	482213111184
A59QDC257X61(N)	930193520522
A59QDC257X61(Q)	930193530522
A59QDF891X001(L)	932216387682
A66EAK071X11	482213111045
A66EAK075X21	930186300301
A66EAK075X54	930186310314
A68ELA021X201	932220517682
A68ERF012X013	930194090314
A68ERF112X013	930194090314
A68ERF142X044	930196570347
A68QCP691X500	932221383682
A68QCP691X501	932221384682

A68QCP893X001	932217375682
A68QCU770X73(N)	930194660542
A68QDL280X062	932219605682
A68QDL281X062	932219606682
A80ERF042X45	930192720542
A80ERF142X45	930195360542
P16LXL00BMB(C	932220293682
P16LXL00HHA(C)	932220292682
P16LXL00RFA(C)	932220291682
W66ECK001X14	482213111345
W66ECK011X14	482213111345
W66ERF022X013	930188810314
W66ERF072X044	930192160307
W66ERF112X013	930193420307
W76ERF022X013	930188830314
W76ERF022X016	930188830314
W76ERF042X044	930188070314
W76ERF072X044	930192190314
W86ERF063X144	930191450304

TFT/PDP Survey

Display TYPE	**CODE NUMBER**
LC150X01-A3	932219631682
LC150X02-A4	932220748682
LC171W03-A4	932219632682
LC171W03-A4KC	932221148682
LC201V02-A3	932219744682
LC201V02-A3	932219744682
LC201V02-A3K5	932221150682
LC201V1-A1	996500016522
LC230W01-A2K8	932220984682
LC260W01-A5K6	932221269682
LC300W01-A3P7	932219800682
QD23WL05	932221413682

Software Survey

SOFTWARE SURVEY

CHASSIS	FAMILY	PRODUCTION CODE	uP TYPE/VERSION	IDENT	SERVICE CODE	HOTEL MODE ?	REMARKS TYPICAL FOR THIS SOFTWARE	REPLACED BY	
								IDENT	SERVICE CODE
A02E AA	Europe W+E	From Wk344		A02EB1-1.01	9965 000 23334	No		A02EB1-1.09	3139 127 01304
A02E AA	Europe W+E	From Wk345		A02EB1-1.02	9965 000 23334	No		A02EB1-1.09	3139 127 01304
A02E AA	Europe W+E	From Wk348		A02EB1-1.03	3138 127 01301	No		A02EB1-1.09	3139 127 01304
A02E AA	Europe W+E	From Wk402		A02EB1-1.05	3138 127 01302	No		A02EB1-1.09	3139 127 01304
A02E AA	Europe W+E	From Wk404		A02EB1-1.07	3138 127 01303	No		A02EB1-1.09	3139 127 01304
A02E AA	Europe W+E, 800pg TXT, digital scan	From Wk404		A02EB1-1.08		No		A02EB1-1.09	3139 127 01304
A02E AA	Europe W+E, 800pg TXT, digital scan	From Wk404		A02EB1-1.09	3139 127 01304	No		A02EX1-2.02	3139 127 01534
A02E AA	Europe W+E, 800pg TXT, digital scan	From Wk423		A02EB1-1.31	?	No		A02EX1-2.02	3139 127 01534
A02E AA	Europe W+E, 100pg TXT	From Wk423		A02EB1-1.41	?	No		A02EX1-2.02	3139 127 01534
A02E AA	Europe W+E, 100pg TXT	From Wk444		A02EX1-2.02	3139 127 01534	No	Introduction of volume curve option using EWU option bit in th eSAM mode. EWU = OFF for 2k3 sets and EWU = ON for2k3+	-	-
A02E AA	Europe W+E, 800pg TXT, digital scan, 2k3+	From Wk421		A02EB1-1.23	?	No	Solved: Hang up and blue mute on normal picture	-	-
A02E AA	Europe W+E, 800pg TXT, digital scan, 2k3+	From Wk423		A02EB1-1.31	3139 127 01533	No	Solved: hang up issue	-	-
A02E AA	Europe W+E, 100pg TXT, 2k3 and 2k3+	From Wk444		A02EX1-2.02	3139 127 01534	No	Only for service	-	-
A02E AA	Europe W+E, 800pg TXT, digital scan, 2k4			A02EU04-2.4	3139 127 02291	No	Solved: Hang up and blue mute on normal picture	-	-
A02E AA	Europe W+E, 800pg TXT, digital scan, 2k4			A02EU04-3.1	3139 127 02292	No	Solved: Hang up and blue mute on normal picture	-	-
A02E AA	Europe W+E, 800pg TXT, digital scan, 2k4			A02EU04-3.22	3139 127 02293	No	Solved: Hang up and blue mute on normal picture	-	-
A10A AA	China, non-TXT	From Wk026 and higher	SAA5645	A10AP1-1.0	9965 000 07276	No	Initial version	A10AP1-1.9	9965 000 07276
A10A AA	China, non-TXT	From Wk029 and higher	SAA5645	A10AP1-1.1	9965 000 07276	No	OSD of the a locked channel is not displayed - Tv lock updown channel of CVI - Comfilter switching problem at low signal - PIP OSD position in mode 1,2,3,4. - PIP OSD out of PIP window when in CVI. - Dual I/II key problem on external channel. - TV lock problem enter access code.	A10AP1-1.9	9965 000 07276
A10A AA	China, non-TXT	From Wk030 and higher	SAA5645	A10AP1-1.3	9965 000 07276	No	HeadPhone plop sound during PIP channel change - Adjust hue(tint) offset for non CVI - After manual store, the sound reset to theater - Hue value in CSM is -50. Whereas in normal mode is 0. - A/CH to toggle RF source to AV source is not working when program list is on. - Program list scrolling when av source is skipped problem.- Contrast reduction when no video ident.- Headphone not mute when OPC, DW, PIP off	A10AP1-1.9	9965 000 07276
A10A AA	China, non-TXT	From Wk034 and higher	SAA5645	A10AP1-1.4	9965 000 07276	No	IO expander set / reset SAW filter should be done for all AP region. - Double window corruption. - To fix warning message for PIP	A10AP1-1.9	9965 000 07276
A10A AA	China, non-TXT		SAA5645	A10AP1-1.5	9965 000 07276	No	Audio is muted after the fine tune value in the install submenu is adjusted and stored into A10 DVD.	A10AP1-1.9	9965 000 07276
A10A AA	China, non-TXT	From Wk052 and higher	SAA5645	A10AP1-1.6	9965 000 07276	No	Remove PIP submenu when the option PIPC is OFF. - Headphone crosstalk problem - To mute headphone when no singal input and during PIP channel change. - Colour could not be detected when plug-in Y/C cable problem	A10AP1-1.9	9965 000 07276
A10A AA	China, non-TXT	From Wk126 and higher	SAA5645	A10AP1-1.8	9965 000 07276	No	Sound is muted after perform fine tuning and stored. - White line is seen in 16:9 mode with DVD input for NTSC mode	A10AP1-1.9	9965 000 07276
A10A AA	China, non-TXT	From Wk201+C36 and higher	SAA5645	A10AP1-1.9	9965 000 07276	No		-	-
A10A AA	AP PAL/Multi (/57, /69, /73, /79), 10pg TXT	From Wk034 and higher	SAA5667	A10AS1-1.0	9965 000 07277	No	Initial version	A10AS1-1.6	9965 000 07277
A10A AA	AP PAL/Multi (/57, /69, /73, /79), 10pg TXT	From Wk040 and higher	SAA5667	A10AS1-1.1	9965 000 07277	No	Teletext clock display - IO expander set / reset SAW filter should be done for all AP region. - Double window corruption. - Fix warning message for PIP	A10AS1-1.6	9965 000 07277
A10A AA	AP PAL/Multi (/57, /69, /73, /79), 10pg TXT	From Wk047 and higher	SAA5667	A10AS1-1.2	9965 000 07277	No	Remove PIP submenu when the option PIPC is OFF. - Headphone crosstalk problem - To mute headphone when no singal input and during PIP channel change. - Colour could not be detected when plug-in Y/C cable problem	A10AS1-1.6	9965 000 07277
A10A AA	AP PAL/Multi (/57, /69, /73, /79), 10pg TXT	From Wk126 and higher	SAA5667	A10AS1-1.4	9965 000 07277	No	White line is seen in 16:9 format with DVD input in NTSC mode.	A10AS1-1.6	9965 000 07277
A10A AA	AP PAL/Multi (/57, /69, /73, /79), 10pg TXT		SAA5667	A10AS1-1.6	9965 000 07277	No			
A10A AA	Middle East (/56), 10pg TXT	From Wk036 and higher	SAA5667	A10AS2-1.0	9965 000 07281	No	Initial version	A10AS2-1.4	9965 000 07281
A10A AA	Middle East (/56), 10pg TXT	From Wk040 and higher	SAA5667	A10AS2-1.1	9965 000 07281	No	IO expander set / reset SAW filter should be done for all AP region. - Double window corruption. - To fix warning message for PIP	A10AS2-1.4	9965 000 07281
A10A AA	Middle East (/56), 10pg TXT	From Wk047 and higher	SAA5667	A10AS2-1.2	9965 000 07281		Remove PIP submenu when the option PIPC is OFF. - Headphone crosstalk problem - To mute headphone when no singal input and during PIP channel change. - Colour could not be detected when plug-in Y/C cable	A10AS2-1.4	9965 000 07281
A10A AA	Middle East (/56), 10pg TXT	From Wk126 and higher	SAA5667	A10AS2-1.3	9965 000 07281		Dark page subtitle - Shift down OSD from first row - White line is seen in 16:9 format with DVD input in NTSC mode.	A10AS2-1.4	9965 000 07281
A10A AA	Middle East (/56), 10pg TXT		SAA5667	A10AS2-1.4	9965 000 07281			-	-
A10A AA	AP PAL/Multi (/57, /69, /79) 100pg TXT	From Wk033 and higher	SAA5667	A10AT1-1.0	9965 000 07282	No	Initial version	A10AT1-1.6	9965 000 07282
A10A AA	AP PAL/Multi (/57, /69, /79) 100pg TXT	From Wk034 and higher	SAA5667	A10AT1-1.1	9965 000 07282	No	Teletext clock display - IO expander set / reset SAW filter should be done for all AP region. - Double window corruption. - Fix warning message for PIP	A10AT1-1.6	9965 000 07282
A10A AA	AP PAL/Multi (/57, /69, /79) 100pg TXT	From Wk044 and higher	SAA5667	A10AT1-1.2	9965 000 07282	No	Max cathode drive - Ports controllable by ComPair	A10AT1-1.6	9965 000 07282
A10A AA	AP PAL/Multi (/57, /69, /79) 100pg TXT	From Wk052 and higher	SAA5667	A10AT1-1.3	9965 000 07282	No	Remove PIP submenu when the option PIPC is OFF. - Headphone crosstalk	A10AT1-1.6	9965 000 07282
A10A AA	AP PAL/Multi (/57, /69, /79) 100pg TXT	From Wk111 and higher	SAA5667	A10AT1-1.4	9965 000 07282	No	Dark page subtitle - Shift down OSD from first row	A10AT1-1.6	9965 000 07282
A10A AA	AP PAL/Multi (/57, /69, /79) 100pg TXT	From Wk126 and higher	SAA5667	A10AT1-1.5	9965 000 07282	No	White line is seen in 16:9 format with DVD input in NTSC mode.	A10AT1-1.6	9965 000 07282
A10A AA	AP PAL/Multi (/57, /69, /79) 100pg TXT	From Wk201 and higher	SAA5667	A10AT1-1.6	9965 000 07282	No		-	-

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CHASSIS	FAMILY	PRODUCTION CODE	uP TYPE/VERSION	IDENT	SERVICE CODE	HOTEL MODE ?	REMARKS TYPICAL FOR THIS SOFTWARE	REPLACED BY	
								IDENT	SERVICE CODE
A10A AA	Middle East PAL/Multi (/56), 100pg TXT	From Wk037 and higher	SAA5667	A10AT2-1.0	9965 000 07283	No	Initial version	A10AT2-1.4	9965 000 07283
A10A AA	Middle East PAL/Multi (/56), 100pg TXT	From Wk040 and higher	SAA5667	A10AT2-1.1	9965 000 07283	No	IO expander set / reset SAW filter should be done for all AP region. - Double window corruption. - Fix warning message for PIP	A10AT2-1.4	9965 000 07283
A10A AA	Middle East PAL/Multi (/56), 100pg TXT	From Wk052 and higher	SAA5667	A10AT2-1.2	9965 000 07283	No		A10AT2-1.4	9965 000 07283
A10A AA	Middle East PAL/Multi (/56), 100pg TXT	From Wk126 and higher	SAA5667	A10AT2-1.3	9965 000 07283	No	Dark page subtitle (P801) - Shift down OSD from first row - White line is seen in 16:9 format with DVD input in NTSC mode.	A10AT2-1.4	9965 000 07283
A10A AA	Middle East PAL/Multi (/56), 100pg TXT	From Wk201 and higher	SAA5667	A10AT2-1.4	9965 000 07283	No		-	-
A10A AA	AP-NTSC (/71, /97) non-TXT,	From Wk037 and higher	SAA5645	A10AN1-1.1	9965 000 07284	No	Initial version	A10AN1-1.6	9965 000 07284
A10A AA	AP-NTSC (/71, /97) non-	From Wk107 and higher	SAA5645	A10AN1-1.3	9965 000 07284	No	Only mono sound can be heard upon mains ON - Headphone crosstalk problem	A10AN1-1.6	9965 000 07284
A10A AA	AP-NTSC (/71, /97) non-	From Wk126 and higher	SAA5645	A10AN1-1.5	9965 000 07284	No	White line is seen in DVD 16:9 mode.	A10AN1-1.6	9965 000 07284
A10A AA	AP-NTSC (/71, /97) non-	From Wk201 and higher	SAA5645	A10AN1-1.6	9965 000 07284	No		-	-
A10A AA	AP-NTSC (/61), non-TXT, CC	From Wk037 and higher	SAA5645	A10AN2-1.1	9965 000 07285	No	Initial version	A10AN2-1.6	9965 000 07285
A10A AA	AP-NTSC (/61), non-TXT, CC	From Wk111 and higher	SAA5645	A10AN2-1.2	9965 000 07285	No	Cancel all timer when hospitality mode is entered - Close Caption does not display after setting it to ON - Close Caption display problem in CVI mode - Lock icon can be seen in program list when CHLK is OFF - Left side of the screen is unblanked in blocked channel when sleeptimer is ON and Close Caption is ON - Last status of sound detection - Error 16 & 13 reported in SDM when shorting SDM pins - Hospitality mode reset problem - No sound on channel 6 via	A10AN2-1.6	9965 000 07285
A10A AA	AP-NTSC (/61), non-TXT, CC	From Wk126 and higher	SAA5645	A10AN2-1.5	9965 000 07285	No	White line is seen in DVD 16:9 mode.	A10AN2-1.6	9965 000 07285
A10A AA	AP-NTSC (/61), non-TXT, CC	From Wk201 and higher	SAA5645	A10AN2-1.6	9965 000 07285	No		-	-
A10A AA DVD	AP PAL/Multi (/57, /69, /79) 100pg TXT,	From Wk041 and higher	SAA5667	A10ADT1-1.0	9965 000 07286	No	Initial version	A10ADT1-1.5	9965 000 07286
A10A AA DVD	AP PAL/Multi (/57, /69, /79) 100pg TXT, DVD-combi	From Wk044 and higher	SAA5667	A10ADT1-1.1	9965 000 07286	No	Headphone mute when RF has no signal - "X" not shown when RC5 INCR. SURR pressed in DVD mode	A10ADT1-1.5	9965 000 07286
A10A AA DVD	AP PAL/Multi (/57, /69, /79) 100pg TXT,	From Wk111 and higher	SAA5667	A10ADT1-1.4	9965 000 07286	No	Dark page subtitle problem - Shift down OSD from first row	A10ADT1-1.5	9965 000 07286
A10A AA DVD	AP PAL/Multi (/57, /69, /79) 100pg TXT,	From Wk126 and higher	SAA5667	A10ADT1-1.5	9965 000 07286	No	White line is seen in DVD 16:9 mode.	-	-
A10E AA	W.Europe, 10 page TXT	Production start	SAA5565/M3	A10ET1-1.0	n.a.	No	Inintial version	A10ET1-1.7	3111 250 54511
A10E AA	W.Europe, 10 page TXT	Production	SAA5565/M3	A10ET1-1.1	9352 677 14557	No		A10ET1-1.7	3111 250 54511
A10E AA	W.Europe, 10 page TXT	From Wk 032	SAA5565/M3	A10ET1-1.2	n.a.	No		A10ET1-1.7	3111 250 54511
A10E AA	W.Europe, 10 page TXT	From Wk 034	SAA5565/M3	A10ET1-1.3	9352 681 58557	No		A10ET1-1.7	3111 250 54511
A10E AA	W.Europe, 10 page TXT	From Wk 036	SAA5565/M3	A10ET1-1.4	3111 250 54511	No		A10ET1-1.7	3111 250 54511
A10E AA	W.Europe, 10 page TXT	From Wk 128	SAA5565/M3	A10ET1-1.6	3111 250 54511	No	Solving of embarrassing Mute in EXT1 when DVD connected	A10ET1-1.7	3111 250 54511
A10E AA	W.Europe, 10 page TXT	From Wk 204	SAA5565/M3	A10ET1-1.7	3111 250 54511	No	Solving of DST issue	A10ET1-1.7	3111 250 54511
A10E AA	W.Europe, 10 page TXT		SAA5565/M3	A10ET1-1.8	3111 250 54511	No		A10ET1-1.7	3111 250 54511
A10E AA	W.Europe, 100 page TXT	Production start	SAA5667	A10EP1-1.1	n.a.	No	When software version A10EP1-2.0 is used change : VERSION_MAIN_ID on address 12(HEX) from value 01 to 02 and VERSION_SUB_ID on address 13(HEX) from value 09 to 00 in NVM	A10EP1-2.0	3111 250 54501
A10E AA	W.Europe, 100 page TXT	From Wk 036	SAA5667	A10EP1-1.3	3111 250 54501	No	When software version A10EP1-2.0 is used change : VERSION_MAIN_ID on address 12(HEX) from value 01 to 02 and VERSION_SUB_ID on address 13(HEX) from value 09 to 00 in NVM	A10EP1-2.0	3111 250 54501
A10E AA	W.Europe, 100 page TXT	From Wk 116	SAA5667	A10EP1-1.4	3111 250 54501	No	When software version A10EP1-2.0 is used change : VERSION_MAIN_ID on address 12(HEX) from value 01 to 02 and VERSION_SUB_ID on address 13(HEX) from value 09 to 00 in NVM	A10EP1-2.0	3111 250 54501
A10E AA	W.Europe, 100 page TXT	From Wk 143	SAA5667	A10EP1-1.6	3111 250 54501	No	When software version A10EP1-2.0 is used change : VERSION_MAIN_ID on address 12(HEX) from value 01 to 02 and VERSION_SUB_ID on address 13(HEX) from value 09 to 00 in NVM	A10EP1-2.0	3111 250 54501
A10E AA	W.Europe, 100 page TXT	From Wk 215	SAA5667	A10EP1-2.0	3111 250 54501	No		-	-
A10E AA	E.Europe, 100 page TXT	Prod. start from Wk 040	SAA5667	A10EP2-1.0	9965 000 07287	No	Initial version	A10EP2-1.2	9965 000 07287
A10E AA	E.Europe, 100 page TXT		SAA5667	A10EP2-1.2	9965 000 07287	No		-	-
A10E AA	E.Europe, 100 page TXT		SAA5667	A10EP2-1.3	9965 000 17228	No		-	-
A10E AA DPL	W.Europe, 100 page TXT	Prod. Start from Wk 039	SAA5667	A10ED1-1.0	9965 000 10425	No	Initial version	A10ED1-1.2	9965 000 10425
A10E AA DPL	W.Europe, 100 page TXT	Prod. Start from Wk 128	SAA5667	A10ED1-1.2	9965 000 10425	No		-	-
A10E AA DPL	E.Europe, 100 page TXT		SAA5667	A10ED2-1.0	9965 000 07288	No	Initial version	-	-
A10E AA DVD	W.Europe, 100 page TXT	Prod. Start from Wk 115	SAA5667	A10EDN1-1.1	9965 000 10426	No	Initial version	A10EDN1-1.5	9965 000 10426
A10E AA DVD	W.Europe, 100 page TXT	Prod. Start from Wk 126	SAA5667	A10EDN1-1.2	9965 000 10426	No	Also known by the A10EVD2EU1-1.2	A10EDN1-1.5	9965 000 10426
A10E AA DVD	W.Europe, 100 page TXT	Prod. Start from Wk 133	SAA5667	A10EDN1-1.3	9965 000 10426	No		A10EDN1-1.5	9965 000 10426
A10E AA DVD	W.Europe, 100 page TXT	Prod. Start from Wk 137	SAA5667	A10EDN1-1.5	9965 000 10426	No		-	-
A10E AA DVD	W.Europe, 100 page TXT	Prod. Start from Wk 208	SAA5667	A10EDN1-1.9	9965 000 15988	No	Drift of OSD clock is solved	-	-
A10E AA DVD	ASD1.0 application	QG4	AM29LV160BT-90SC	Version 7.26	3104 123 85540	n.a.			
A10E AA DVD	ASD1.0 servo	QG4	AM29F002T	Version 5.1.14	3104 123 85860	n.a.			
A10E AA DVD	SD3.0 application software	QG5	AM29LV160DT-90SC	Version 4.15.M-0	9965 000 16405	n.a.			
A10E AA DVD	ASD1.0 servo	QG4	AM29F002T	Version 5.1.14	3104 123 85860	n.a.			
A10E AA DVD+DPL	W.Europe, 100 page TXT	Prod. Start from Wk 135	SAA5667	A10EDD1-1.0	9965 000 12349	No	Initial version	A10EDD1-1.3	9965 000 12349
A10E AA DVD+DPL	W.Europe, 100 page TXT	Prod. Start from Wk 208	SAA5667	A10EDD1-1.3	9965 000 12349	No	Drift of OSD clock is solved	-	-
A10E AA DVD+DPL	ASD1.0 application	QG4	AM29LV160BT-90SC	Version 7.26	3104 123 85540	n.a.			
A10E AA DVD+DPL	ASD1.0 servo	QG4	AM29F002T	Version 5.1.14	3104 123 85860	n.a.			
A10E AA DVD+DPL	SD3.0 application software	QG5	AM29LV160DT-90SC	Version 4.15.M-0	9965 000 16405	n.a.			
A10E AA DVD+DPL	ASD1.0 servo	QG4	AM29F002T	Version 5.1.14	3104 123 85860	n.a.			
A10E AA DVD+DPL	E.Europe, 100 page TXT	Prod. Start from Wk 135	SAA5667	A10EVD1-1.0	9965 000 12350	No	Initial version	A10EVD1-1.3	9965 000 12350

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CHASSIS	FAMILY	PRODUCTION CODE	uP TYPE/VERSION	IDENT	SERVICE CODE	HOTEL MODE ?	REMARKS TYPICAL FOR THIS SOFTWARE	REPLACED BY	
								IDENT	SERVICE CODE
A10E AA DVD+DPL	E.Europe, 100 page TXT	Prod. Start from Wk 208	SAA5667	A10EVD1-1.3	9965 000 12350	No	Drift of OSD clock is solved	-	-
A10E AA DVD+DPL	ASD1.0 application	QG4	AM29LV160BT-90SC	Version 7.26	3104 123 85540	n.a.			
A10E AA DVD+DPL	ASD1.0 servo	QG4	AM29F002T	Version 5.1.14	3104 123 85860	n.a.			
A10E AA DVD+DPL	SD3.0 application software	QG5	AM29LV160DT-90SC	Version 4.15.M-0	9965 000 16405	n.a.			
A10E AA DVD+DPL	ASD1.0 servo	QG4	AM29F002T	Version 5.1.14	3104 123 85860	n.a.			
A10E AA DVD+DPL	W.Europe, Digital TV	Prod. Start from Wk 223	SAA5667	A10EGN1-1.0	9965 000 14559	No		A10EGN1-1.3	9965 000 14559
A10E AA DVD+DPL	W.Europe, Digital TV	Prod. Start from Wk 224	SAA5667	A10EGN1-1.1	9965 000 14559	No		A10EGN1-1.3	9965 000 14559
A10E AA DVD+DPL	W.Europe, Digital TV	Prod. Start from Wk 227	SAA5667	A10EGN1-1.3	9965 000 14559	No		-	-
A10E AA DVD+DPL	W.Europe, Digital TV	Prod. Start from Wk 232	SAA5667	A10EGN1-1.4	3111 250 54851	No		-	-
A10E AA DVD+DPL	ASD1.0 application software	QG4	AM29LV160BT-90SC	Version 7.26	3104 123 85540	n.a.			
A10E AA DVD+DPL	SD3.0 application software	QG5	AM29LV160DT-90SC	Version 4.15.M-0	9965 000 16405	n.a.			
A10E BB	W.Europe, Digital TV	Prod. Start from Wk335	SAA5667	A10EMH-1.2	3111 250 54951	No		-	-
EM1A	Cluster 1AP1	Production start	SAA5647HL/M1	EM11A1_2.0_02871	3104 317 02871		First release in production	EM11A1_2.1_02921	3104 317 02921
EM1A	Cluster 1AP1	From week 0109	SAA5647HL/M1	EM11A1_2.1_02921	3104 317 02921			EM11A1_2.4_03261	3104 317 03261
EM1A	Cluster 1AP1	AG01, from week 0128	SAA5647HL/M1	EM11A1_2.4_03261	3104 317 03261		New MSP B8-version.		
EM1A	Cluster 1AP1	From week 0203	SAA5647HL/M1	EM11A1_3.0_03571	3104 317 03571		**Only for 34PT8419.** Solution for: Microphony (reduced bass-settings), PIP-AGC to 8, Bass control option, Bass/Treble lost.	EM11A1_3.2_03921	3104 317 03921
EM1A	Cluster 1AP1	From week 0220	SAA5647HL/M1	EM11A1_3.2_03921	3104 317 03921		Solution for: possible NVM data corruption.		
EM1A	Cluster 2AP1	Production start	SAA5667HL/M1	EM12A1_2.0_02881	3104 317 02881			EM12A1_2.1_02931	3104 317 02931
EM1A	Cluster 2AP1	From week 0109	SAA5667HL/M1	EM12A1_2.1_02931	3104 317 02931			EM12A1_2.4_03271	3104 317 03271
EM1A	Cluster 2AP1	AG01, from week 0128	SAA5667HL/M1	EM12A1_2.4_03271	3104 317 03271		New MSP B8-version.		
EM1A	Cluster 2AP1	From week 0204	SAA5667HL/M1	EM12A1_3.0_03561	3104 317 03561		**Only for 29PT8419.** Microphony solution (reduced bass-settings).		
EM1A	Cluster 2AP1	AG03+C81	SAA5667HL/M1	EM12A1_3.0_03631	3104 317 03631		**Only for 34PT8419.** Microphony solution (reduced bass-settings).		
EM1A	Cluster 2AP1	From week 0222	SAA5667HL/M1	EM1A21_1.0	9965 000 14382		**Only for 29/34PT8420.**	EM1A21_1.2	9965 000 14382
EM1A	Cluster 2AP1	From week 0232	SAA5667HL/M1	EM1A21_1.2	9965 000 14382		**Only for 29/34PT8420.** Solution for: Missing Chinese characters in Dynamic Contrast menu.		
EM1A	Cluster 2AP2	Production start	SAA5667HL/M1	EM12A2_2.0_02891	3104 317 02891			EM12A2_2.4_03281	3104 317 03281
EM1A	Cluster 2AP2	AG01, from week 0128	SAA5667HL/M1	EM12A2_2.4_03281	3104 317 03281		New MSP B8-version.		
EM1A	Cluster 2AP2	From week 0208	SAA5667HL/M1	EM12A2_3.0_03621	3104 317 03621		**Only for 34PT8419.** Microphony solution (reduced bass-settings).		
EM1A	Cluster 2AP2	From week 0222	SAA5667HL/M1	EM1A22_1.0	9965 000 14383		**Only for 29/34PT8420.**	EM1A22_1.1	9965 000 14383
EM1A	Cluster 2AP2	From week 0234	SAA5667HL/M1	EM1A22_1.1	9965 000 14383		**Only for 29/34PT8420.** Solution for: Subwoofer not muted during channel change, Incorrect Chinese characters in 'Digital Option'.		
EM1A-NTSC	Cluster 3AP1	From week 0133	SAA5677HL/M1	EM13A1_1.1_03321	3104 317 03321			EM13A1_1.2_03351	3104 317 03351
EM1A-NTSC	Cluster 3AP1	From week 0134	SAA5677HL/M1	EM13A1_1.2_03351	3104 317 03351			EM13A1_1.3_03371	3104 317 03371
EM1A-NTSC	Cluster 3AP1	From week 0135	SAA5677HL/M1	EM13A1_1.3_03371	3104 317 03371				
EM1A-NTSC	Cluster 3AP1	AG02, from week 0208	SAA5677HL/M1	EM13A1_3.0_03661	3104 317 03661		**Only for 34PT8419.** Microphony solution (reduced bass-settings).		
EM1A-NTSC	Cluster 3AP1	From week 0222	SAA5677HL/M1	EM1A31_1.0	9965 000 14384		**Only for 29/34PT8420.**	EM1A31_1.1	9965 000 14384
EM1A-NTSC	Cluster 3AP1	From week 0234	SAA5677HL/M1	EM1A31_1.1	9965 000 14384		**Only for 29/34PT8420.** Solution for: Several OSD problems, Channel does not change when 'Lock Channel' list is toggled.		
EM1A-NTSC	Cluster 3AP2	From week 0133	SAA5677HL/M1	EM13A2_1.1_03331	3104 317 03331			EM13A2_1.2_03361	3104 317 03361
EM1A-NTSC	Cluster 3AP2	From week 0134	SAA5677HL/M1	EM13A2_1.2_03361	3104 317 03361			EM13A2_1.3_03381	3104 317 03381
EM1A-NTSC	Cluster 3AP2	From week 0135	SAA5677HL/M1	EM13A2_1.3_03381	3104 317 03381			EM13A2_2.0_03491	3104 317 03491
EM1A-NTSC	Cluster 3AP2	From week 0211	SAA5677HL/M1	EM13A2_2.0_03491	3104 317 03491				
EM1A-NTSC	Cluster 3AP2	AG02, from week 0208	SAA5677HL/M1	EM13A2_3.0_03651	3104 317 03651		**Only for 34PT8419.** Microphony solution (reduced bass-settings).		
EM1A-NTSC	Cluster 3AP2	From week 0222	SAA5677HL/M1	EM1A32_1.0	9965 000 14385		**Only for 29/34PT8420.**	EM1A32_1.1	9965 000 14385
EM1A-NTSC	Cluster 3AP2	From week 0234	SAA5677HL/M1	EM1A32_1.1	9965 000 14385		**Only for 29/34PT8420.** Solution for: Several OSD problems, Channel does not change when 'Lock Channel' list is toggled.		
EM1A-NTSC	Cluster 3AP2	From week 0250	SAA5677/HL/M1	EM1A32-2.4	9965 000 20631				
EM1.1A			SAA5695HL/M1	EM1A21-1.2_EM1.1A AA	9965 000 20298				
EM1.1A		From week 426	SAA5697HL/M1	EM1A21-2.1_EM1.1A AA	9965 000 24573				
EM1.1A			SAA5695HL/M1	EM1A22-1.2_EM1.1A AA	9965 000 20405				
EM1.1A		From week 426	SAA5697HL/M1	EM1A22-2.1_EM1.1A AA	9965 000 24574				
EM1.2A	-/71	From week 343	SAA5677HL/M1	EM1A31-1.4_EM1.2A AA	3139 127 00911				
EM1.2A	-/61	From week 343	SAA5697HL/M1	EM1A32-1.3_EM1.2A AA	3139 127 00901				
EM1.2A			SAA5677HL/M1	EM1A31-1.1_EM1.2A AA	9965 000 20439				
EM1.2A			SAA5677HL/M1	EM1A32-1.1_EM1.2A AA	9965 000 20440				
EM1L	Cluster 1LT1	From week 0126	SAA5677HL/M1	EM11L1_1.1_03401	3104 317 03401			EM11L1_2.0_03781	3104 317 03781
EM1L	Cluster 1LT1	From week 0212	SAA5677HL/M1	EM11L1_2.0_03781	3104 317 03781				
EM1L	Cluster 2LT1	From week 0136	SAA5677HL/M1	EM12L1_1.2_03411	3104 317 03411				
EM1L	Cluster 2LT1	From week 0212	SAA5677HL/M1	EM12L1_2.0_03791	3104 317 03791		**Only for 34PT8419/78.** Adapted for using ComPair tool.		
N8	Cluster 2US1	Production start	SAA5677HL/M1	EM12U1_2.2_03391	3104 317 03391			EM12U1_3.0_03801	3104 317 03801
N8	Cluster 2US1	From week 0212	SAA5677HL/M1	EM12U1_3.0_03801	3104 317 03801				

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CHASSIS	FAMILY	PRODUCTION CODE	uP TYPE/VERSION	IDENT	SERVICE CODE	HOTEL MODE ?	REMARKS TYPICAL FOR THIS SOFTWARE	REPLACED BY	
								IDENT	SERVICE CODE
N8 (Design Line)	Cluster 3US1	From week 0140	SAA5677HL/M1	EM13U1_1.3_03461	3104 317 03461				
P8	Cluster 4US1	From week 0220	SAA5677HL/M1	EM14U1_2.0_04001	3104 317 04001				
EM1*	FBX	From week 0007		EMG_REP1_02221	3104 317 42221			EMG_REP2_02341	3104 317 42341
EM1*	FBX	From week 0012		EMG_REP2_02341	3104 317 42341			EMG_REP3_02491	3104 317 42491
EM1*	FBX	From week 0027		EMG_REP3_02491	3104 317 42491		For EM1A: use 3104 317 42991. For EM1L and EM1A-NTSC: use 3104 317 42741		
EM1L, EM1A-NTSC	FBX	From week 0042		EMG_RMERGE1_02741	3104 317 42741				
EM1A	FBX	From week 0112		EMG_RMERGE2_02991	3104 317 42991				
N8, P8	FBX			EMG_RMERGE3_03241	3104 317 43241				
EM5A NTSC	uP	Production start (0240)		EM5AN1_1.0_04061	3104 317 44061			EM5AN1_1.2_04281	3104 317 44281
EM5A NTSC	uP	AG02, from week 0304		EM5AN1_1.2_04281	3104 317 44281		Solved: OSD translation errors in Hangul and Chinese.	EM5AN1_1.3_04871	3104 317 44871
EM5A NTSC	uP	AG03, from week 0319		EM5AN1_1.3_04871	3104 317 44871		Solved: OSD translation errors in Hangul and Chinese, H. and V. adjustments added for 2fH inputs.		
EM5E	uP	Production start (0240)		EM5EU1_1.4_04111	3104 317 44111			EM5EU1_2.3_04181	3104 317 44181
EM5E	uP	AG02, from week 0244		EM5EU1_2.3_04181	3104 317 44181		New: **Alignments** and **Options** must be 'stored' before leaving SAM (not valid for USA). Solved: Several TXT problems, EPG hang-ups, Permanent OSD.	EM5EU1_2.4_04251	3104 317 44251
EM5E	uP	AG03, from week 0250		EM5EU1_2.4_04251	3104 317 44251		Solved: EPG hang-up problems.	EM5EU1_2.5_04411	3104 317 44411
EM5E DVD	uP	Production start		EM5EU1_2.2_04081	3104 317 44081			EM5EU1_2.3_04181	3104 317 44181
EM5E DVD	uP	AG02, from week 0248		EM5EU1_2.3_04181	3104 317 44181		New: **Alignments** and **Options** must be 'stored' before leaving SAM (not valid for USA). Solved: Several TXT problems, EPG hang-ups, Permanent OSD.	EM5EU1_2.4_04251	3104 317 44251
EM5E DVD	uP	AG03, from week 0250		EM5EU1_2.4_04251	3104 317 44251		Solved: EPG hang-up problems.	EM5EU1_2.5_04411	3104 317 44411
EM5E DVD	uP	From week 0325		EM5EU1_2.5_04411	3104 317 44411		Solved: On some channels wrong date in EPG, Spontaneous preset changes, Set sometimes goes into protection in Full Power Stdby, No start-up when Easylink device is connected to EXT2.	EM5EU1_2.6_05701	3104 317 45701
EM5E DVD	uP	From week 0402		EM5EU1_2.6_05701	3104 317 45701		Service solution for: No image with SECAM picture on preset 1 coming from Stby.		
EM5E DVD	uP	From week 0402		EM5EU1_2.7_06301	3104 317 46301		Service solution for: Blocking sets		
EM5L	uP	Production start (0304)		EM5LT1_1.1_04471	3104 317 44471				
R8	uP	Production start		EM5US1_1.0_04011	3104 317 04011				
EM5E/U/A/L	FBX (PixelPlus)	From week 0221		RE1F2_06	3104 317 43881		Solved: Bad display of non-interlaced signals ABAB mode.		
EM5E/U/A/L	FBX (PixelPlus)	Only for Service		RE1F2_07	3104 317 44521		Service solution for: Halo effect ('watery' rims around moving objects).		
EM5E/U/A/L	FBX (non PixelPlus)	From week 0225		RNEF2_03701	3104 317 43701				
EM5E/U/A/L	FBX (PixelPlus)			RNEF2_02	3104 317 45321		Only 32PW8887/12 and 32PW8808/79R		
R8	DDC-NVM for DVI	Production start		EM5U_DVI_04511	3104 317 04511				
EM5.1E	xxPW9308	Production start (0313)		EM51EU_1.1_04781	3104 317 44781			EM51EU_1.2_04941	3104 317 44941
EM5.1E	xxPW9308	From week 0409		EM51EU_1.2_04941	3104 317 44941		Solved: Missing Greek "H" character in TXT.	EM51EU_1.3_06481	3104 317 46481
EM5.1E	xxPW9308/xxPW9319	From week 0411		EM51EU_1.3_06481	3104 317 46481		add acoustical settings		
EM5.1E	4:3	Production start (0312)		EM51EU_2.0_04791	3104 317 44791			EM51EU_2.1_04911	3104 317 44911
EM5.1E	4:3			EM51EU_2.1_04911	3104 317 44911			EM51EU_2.2_05001	3104 317 45001
EM5.1E	4:3			EM51EU_2.2_05001	3104 317 45001			EM51EU_2.3_05101	3104 317 45101
EM5.1E	4:3			EM51EU_2.3_05101	3104 317 45101		Solved: Missing Greek "H" character in TXT, Picture expands vertically after program change,		
EM5.1E	4:3			EM51EU_2.4_06491	3104 317 46491				
EM5.1E	xxPW9528			EM51EU_3.0_05111	3104 317 45111			EM51EU_3.1_05121	3104 317 45121
EM5.1E	xxPW9528			EM51EU_3.1_05121	3104 317 45121			EM51EU_3.2_05211	3104 317 45211
EM5.1E	xxPW9528	From week 0408		EM51EU_3.2_05211	3104 317 45211		Solved: Missing Greek "H" character in TXT.		
EM5.1U	uP	Production start (0304)		EM5US_2.0_04391	3104 317 44391		Solution for: Crash during start-up when [Vol] button is pushed constantly, Clock extraction problem.	EM5US_2.1_04401	3104 317 44401
EM5.1U	uP	Week 0315 and higher		EM5US_2.1_04401	3104 317 44401		Solution for: Lightsensor status indication problem in Dealer menu, PixelPlus demo problem.		
EM5.1E	FBX	Production start (0312)		RE1F2_NSAC_03	3104 317 44671			EM5_FBX_03881	3104 317 43881
EM5.1E	FBX			RE1F2_NSAC_05	3104 317 45311				
EM5.3E				EM53EU_1.0_06341	3104 317 46341			EM53EU_1.1_06351	3104 317 46351
EM5.3E				EM53EU_1.1_06351	3104 317 46351			EM53EU_1.2_06571	3104 317 46571
EM5.3E				EM53EU_1.2_06571	3104 317 46571			EM53EU_1.4_06891	3104 317 46891
EM5.3E				EM53EU_1.4_06891	3104 317 46891				
EM5.3E				EM53EU_1.5_07051	3104 317 47051		Solved: Faulty clock function, Set hangs when navigating through menu.		
EM5.3A P/M	xxPW9529/xx xxPT9421/xx			EM53AP_1.0_06801	3104 317 46801				
EM5.3	FBX			RE1C_COL_CRT_01	3104 317 46281				

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CHASSIS	FAMILY	PRODUCTION CODE	uP TYPE/VERSION	IDENT	SERVICE CODE	HOTEL MODE ?	REMARKS TYPICAL FOR THIS SOFTWARE	REPLACED BY	
								IDENT	SERVICE CODE
EM5.3	FBX			RE1C_COL_CRT_02	3104 317 46561			RE1C_COL_CRT_03	3104 317 46641
EM5.3	FBX			RE1C_COL_CRT_03	3104 317 46641				
EM5.3	FBX			RE1C_COL_CRT_04	3104 317 07001		For AP sets only		
EM6E AA	uP			EM6EU1_1.0_04651	3104 317 44651			EM6EU1_1.1_04771	3104 317 44771
EM6E AA	uP			EM6EU1_1.1_04771	3104 317 44771			EM6EU1_1.2_04851	3104 317 44851
EM6E AA	uP			EM6EU1_1.2_04851	3104 317 44851			EM6EU1_1.3_04861	3104 317 44861
EM6E AA	uP	Week 0324 and higher		EM6EU1_1.3_04861	3104 317 44861				
EM6E AA	uP			EM6EU1_1.4_05671	3104 317 45671		Solved: Missing Greek "H" character in TXT.		
EM6E AA (HDD)	uP			EM6EU1_2.1_05151	3104 317 45151			EM6EU1_2.2_05471	3104 317 45471
EM6E AA (HDD)	uP			EM6EU1_2.2_05471	3104 317 45471			EM6EU1_2.3_05551	3104 317 45551
EM6E AA (HDD)	uP			EM6EU1_2.3_05551	3104 317 45551			EM6EU1_2.4_045681	3104 317 45681
EM6E AA (HDD)	HDRM			HDRM SW 2.5.0	3104 317 04721				
EM6E AA (HDD)	HDRM			HDRM SW 2.5.2	3104 317 06101				
EM6E AB				EM6EU1_3.0_04921	3104 317 04921			EM6EU1_3.1_04951	3104 317 04951
EM6E AB	uP			EM6EU1_3.1_04951	3104 317 04951			EM6EU1_3.2_05201	3104 317 05201
EM6E AB	uP			EM6EU1_3.2_05201	3104 317 05201			EM6EU1_3.3_05261	3104 317 05261
EM6E AB	uP			EM6EU1_3.3_05261	3104 317 05261			EM6EU1_3.4_05271	3104 317 05271
EM6E AB	uP			EM6EU1_3.4_05271	3104 317 05271			EM6EU1_3.5_05461	3104 317 05461
EM6E AB	uP			EM6EU1_3.5_05461	3104 317 05461			EM6EU1_3.6_05541	3104 317 05541
EM6E AB	uP			EM6EU1_3.6_05541	3104 317 05541				
EM6E AB	RDS Radio			Version 1.0.2	3104 317 04931			Version 1.0.5	3104 317 04981
EM6E AB	RDS Radio			Version 1.0.5	3104 317 04981			Version 1.0.7	3104 317 05191
EM6E AB	RDS Radio			Version 1.0.7	3104 317 05191			Version 1.0.8	3104 317 05431
EM6E AB	RDS Radio			Version 1.0.8	3104 317 05431				
EM6E	FBX			RE1F2_NSAC_03	3104 317 44671				
F21RE AA	Ebox-SSP EU/AP			F21RE1_1.0_00247	3122 357 40247			F21RE1_1.1_00248	3122 357 40248
F21RE AA	Ebox-SSP EU/AP			F21RE1_1.1_00248	3122 357 40248		Also valid for AP versions	F21RE1_1.2_00341	3122 357 40341
F21RE AA	Ebox-SSP EU/AP			F21RE1_1.2_00341	3122 357 40341		Solved: Double height in EPG with zoom button, EU/USA diversity added to display alignment settings, EPG in combination with DW or PIP, subtitles not always shown, info line in TXT mode not completely visible, in combination with FTV1.9 missing TXT lines in EPG	F21RE1_1.5_00342	3122 357 40342
F21RE AA	Ebox-SSP EU/AP			F21RE1_1.5_00342	3122 357 40342		Pre-defined last status value for brightness level depended of the monitor type option	F21RE1_1.6_00343	3122 357 40343
F21RE AA	Ebox-SSP EU/AP	AG01 and higher, week 225 onwards		F21RE1_1.6_00343	3122 357 40343		This software can handle monitors of FTV1.9, FM23, FM24 and FM25. For monitor FTV1.9 also the jumper on the AV-interface has to be set accordingly. This softwrae has a build-in monitor auto-detection system for the FM23, FM24 and FM25. For this the jumpers on the AV-interface has to be set for FM23 and the monitor type option (NVM) also has to be set to FM23.	F21RE1_1.7_00344	3122 357 40344
F21RE AA	Ebox-SSP EU/AP			F21RE1_1.7_00344	3122 357 40344		Solution for set switching off and on.	F21RE1_1.8_00345	3122 357 40345
F21RE AA	Ebox-SSP EU/AP	AG02 and higher		F21RE1_1.8_00345	3122 357 40345		Switching on/off scaler implemented as result option numbers have been changed. Option code 3 changed from 49555 into 49587.	F21RE1_1.9_00346	3122 357 40346
F21RE AA	Ebox-SSP EU/AP			F21RE1_1.9_00346	3122 357 40346		Solution for no headphone sound in VGA. Scaler can be switch On/Off with	F21RE1_2.0_04601	3104 317 44601
F21RE AA/AB	Ebox-SSP EU/AP			F21RE1_2.0_04601	3104 317 44601			F21RE1_2.1_04681	3104 317 44681
F21RE AA/AB	Ebox-SSP EU/AP			F21RE1_2.1_04681	3104 317 44681		Solution for light part on top of the screen in TV mode, NTSC colour problems in AP	F21RE1_2.2_04761	3104 317 44761
F21RE AA/AB	Ebox-SSP EU/AP			F21RE1_2.2_04761	3104 317 44761		Not used in production (only service release). Problems solved: Brightness is set to 49, Secam detection is disabled when 60Hz is deteced. (wrong colour detection problem), vertical wait is changed from 22 to 27 (solves 4-5 the white lines on top of the screen) and DVDR P50 communication problem.	F21RE1_2.3_05351	3104 317 45351
F21RE AA/AB	Ebox-SSP EU/AP			F21RE1_2.3_05351	3104 317 45351		Zapping problem and clamping problem is solved by changing the Hop brightness from 15 to 12 (white horizontal band on top the screen)	F21RE1_2.4_05451	3104 317 45451
F21RE AA/AB	Ebox-SSP EU/AP			F21RE1_2.4_05451	3104 317 45451		Zapping problem from version 2.3 is solved (zapping takes too long).	F21RE1_2.5_05481	3104 317 45481
F21RE AA/AB	Ebox-SSP EU/AP			F21RE1_2.5_05481	3104 317 45481		Solved: Several TXT problems.	F21RE1_2.6_05491	3104 317 45491
F21RE AA/AB	Ebox-SSP EU/AP			F21RE1_2.6_05491	3104 317 45491		Solved: wrong '&' character in programm name on Nederland 3 transmission	F21RE1_2.7_06931	3104 317 46931
F21RE AA/AB	Ebox-SSP EU/AP			F21RE1_2.7_06931	3104 317 46931				
F21RE AA/AB	Ebox-SSP EU/AP	Not used in production		F21RE1_3.0_06791	3104 317 46791		Service solution for: Sound interruptions with overmodulated antenna signals in system B/G/H (especially India).	n.a.	n.a.
F21RU AA	Ebox-SSP USA				3104 317 43081			F21RU1_1.1_00362	3122 357 40362
F21RU AA	Ebox-SSP USA			F21RU1_1.1_00362	3122 357 40362			F21RU1_1.2_00364	3122 357 40364
F21RU AA	Ebox-SSP USA			F21RU1_1.2_00364	3122 357 40364			F21RU1_1.3_00365	3122 357 40365
F21RU AA	Ebox-SSP USA			F21RU1_1.3_00365	3122 357 40365			F21RU1_1.4_00366	3122 357 40366
F21RU AA	Ebox-SSP USA	AG01 and higher, week 222 onwards		F21RU1_1.4_00366	3122 357 40366		Solved: Hang ups due to DW, caused by a problem during initialisation of the POPOV IC.	F21RU1_1.8_00368	3122 357 40368
F21RU AA	Ebox-SSP USA	AG02 and higher, week 233 onwards		F21RU1_1.8_00368	3122 357 40368		This software can handle monitors of FTV1.9, FM23, FM24 and FM25. For monitor FTV1.9 also the jumper on the AV-interface has to be set accordingly. This softwrae has a build-in monitor auto-detection system for the FM23, FM24 and FM25. For this the jumpers on the AV-interface has to be set for FM23 and the monitor type option (NVM) also has to be set to FM23.	F21RU1_1.9_00369	3122 357 40369
F21RU AA	Ebox-SSP USA			F21RU1_1.9_00369	3122 357 40369		Solved: Some FDW problems.	F21RU1_1.11_00432	3122 357 40431

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CHASSIS	FAMILY	PRODUCTION CODE	uP TYPE/VERSION	IDENT	SERVICE CODE	HOTEL MODE ?	REMARKS TYPICAL FOR THIS SOFTWARE	REPLACED BY	
								IDENT	SERVICE CODE
F21RU AA	Ebox-SSP USA			F21RU1_1.10_00431	3122 357 40431		Solved: Picture blanking when watching a 1fh signal on AV4 and any other signal is connected to AV5 Y-input	F21RU1_1.11_00432	3122 357 40432
F21RU AA	Ebox-SSP USA	AG03		F21RU1_1.11_00432	3122 357 40432		Solved: Standby problem (takes 15 min. to go to STBY). Change option of "Service Options', 'Miscellaneous', 'Region' into AP NTSC, LATAM, or US.	F21RU1_2.0_04591	3104 317 44591
F21RU AB	Ebox-SSP USA			F21RU1_2.0_04591	3104 317 44591			F21RU1_2.1_04691	3104 317 44691
F21RU AB	Ebox-SSP USA			F21RU1_2.1_04691	3104 317 44691			F21RU1_2.2_04731	3104 317 44731
F21RU AB	Ebox-SSP USA	AG1B		F21RU1_2.2_04731	3104 317 44731				
F21RU	Ebox-AV Interface enhanced		EPLD	F21RU1_3.4_00391	3122 357 40391				
F21RE/U AA	Ebox-FBX			V1.3	3122 357 40134			X6F2V13_V1.3	3122 357 40234
F21RE/U AA	Ebox-FBX			X6F2V13_V1.3	3122 357 40234		Solved: Due to refresh of the FBX by the main software some registers for 60Hz mode in the FBX were incorrectly reset.	X6F2V13_V1.4	3122 357 40235
F21RE/U AA	Ebox-FBX			X6F2V13_V1.4	3122 357 40235		Solved: Vertical zoom in autoformat is reduced for 4:3 pictures, Upper part of picture jitters with certain DVD or VLP in still picture mode (freeze).	X6F2V13_V1.4	3122 357 40236
F21RE/U AA	Ebox-FBX			X6F2V13_V1.5	3122 357 40236				
F21RE/U AA/F21RE/U AB	Ebox-FBX			RENF2_FTV_01_04331	3104 317 44331			RENF2_FTV_01_04332	3104 317 44332
F21RE/U AA/F21RE/U AB	Ebox-FBX			RENF2_FTV_01_04332	3104 317 44332				
F22RE AA	Ebox-SSP EU/AP			F22RE1_1.1_04641	3104 317 44641			F22RE1_1.2_04701	3104 317 44701
F22RE AA	Ebox-SSP EU/AP			F22RE1_1.2_04701	3104 317 44701			F22RE1_1.3_04741	3104 317 44741
F22RE AA	Ebox-SSP EU/AP			F22RE1_1.3_04741	3104 317 44741			F22RE1_1.4_04881	3104 317 44881
F22RE AA	Ebox-SSP EU/AP	AG01		F22RE1_1.4_04881	3104 317 44881		Solved: Problems regarding digital video distortion.	F22RE1_1.5_04891	3104 317 44891
F22RE AA	Ebox-SSP EU/AP			F22RE1_1.5_04891	3104 317 44891			F22RE1_1.6_05041	3104 317 45041
F22RE AA	Ebox-SSP EU/AP			F22RE1_1.6_05041	3104 317 45041		Solved: Set goes into protection after zapping. Sound without picture after	F22RE1_1.7_05051	3104 317 45051
F22RE AA	Ebox-SSP EU/AP			F22RE1_1.7_05051	3104 317 45051			F22RE1_1.8_05581	3104 317 45581
F22RE AA	Ebox-SSP EU/AP			F22RE1_1.8_05581	3104 317 45581		Solved: PixelPlus demo mode problems.	F22RE1_1.9_05591	3104 317 45591
F22RE AA	Ebox-SSP EU/AP			F22RE1_1.9_05591	3104 317 45591		Solved: Name of external AV-inputs is not stored.		
F22RE AA	Ebox-SSP EU/AP			F22RE1_1.A_06251	3104 317 46251		Solved: 'TV Menu' is changed in 'TV' in with cinema-link and greek character H		
F22RE AA	Ebox-SSP EU/AP			F22RE1_1.B_06781	3104 317 46781				
F22RE AA	Ebox-SSP EU/AP			F22RE1_2.0_07641	3104 317 47641		Service solution for: Sound interruptions with overmodulated antenna signals in system B/G/H (especially India).		
F22RE AA	Ebox-SSP EU/AP			F22RE1_3.0_08791	3104 317 48791		Service solution for: Sound crackling due to overmodulated antenna signals in system D/K (especially China).		
F22RU AA	Ebox-SSP USA			F22RU1_1.0_04611	3104 317 44611			F22RU1_1.1_04631	3104 317 44631
F22RU AA	Ebox-SSP USA			F22RU1_1.1_04631	3104 317 44631			F22RU1_1.2_04751	3104 317 44751
F22RU AA	Ebox-SSP USA			F22RU1_1.2_04751	3104 317 44751			F22RU1_1.3_04811	3104 317 44811
F22RU AA	Ebox-SSP USA			F22RU1_1.3_04811	3104 317 44811			F22RU1_1.4_04991	3104 317 44991
F22RU AA	Ebox-SSP USA			F22RU1_1.4_04991	3104 317 44991			F22RU1_1.5_05361	3104 317 45361
F22RU AA	Ebox-SSP USA			F22RU1_1.5_05361	3104 317 45361				
F22RE/U AA	Ebox-FBX			RE1F2_FTV_02_04661	3104 317 44661				
FM23/FM24	Monitor-OTC basic	AG99 and higher		FM23GB-1.1-00272	3122 357 00272			FM23GB-1.3-00274	3122 357 00274
FM23/FM24	Monitor-OTC basic			FM23GB-1.2-00273	3122 357 00273			FM23GB-1.3-00274	3122 357 00274
FM23/FM24/FM33	Monitor-OTC basic			FM23GB-1.3-00274	3122 357 00274		Solution for: reliable working of service pins, in ComPair mode monitor can be switched to SDM, standby, etc.	FM23GB-1.4-00275	3122 357 00275
FM23/FM24/FM33	Monitor-OTC basic			FM23GB-1.5-00275	3122 357 00275		Solution for: VGA direct key does not always function according specification, protection, no sound after switching from AV3 YCbCr to AV3 Auto and vice versa, error code 12, sometimes ther is no picture or sound after switching on the monitor and E-box, green lines visible at the bottom of the screen after panning on 1fh sources.	FM23GA-1.6-00382	3122 357 00382
FM23/FM24	Monitor-OTC enhanced			FM23GE-1.4-00381	3122 357 00381			FM23GE-1.6-00382	3122 357 00382
FM23/FM24	Monitor-OTC enhanced			FM23GA-1.6-00382	3122 357 00382		Solution for: Green flickering screen on AV3 1fH input, when selecting AV3 480P for the first time the picture is blanking/unblanking continiously, green lines visible at the bottom of the screen after panning on 1fH sources, when AV3 is selected sometimes the images is not detected, picture shift not stored in NVM.	FM23GA-1.9-00384	3122 357 00384
FM23/FM24	Monitor-OTC enhanced			FM23GA-1.9-00384	3122 357 00384		ITV functionality added. Problems with ADC alignment in panel mode and VsVa alingment are solved.	FM23GA-2.0-00385	3122 357 00385
FM23/FM24/FM33	Monitor-OTC enhanced			FM23GA-2.0-00385	3122 357 00385			FM23GA-2.2-00387	3122 357 00387
FM23/FM24/FM33	Monitor-OTC enhanced			FM23GA-2.2-00387	3122 357 00387			FM23GA-2.3-00388	3122 357 00388
FM23/FM24/FM33	Monitor-OTC enhanced			FM23GA-2.3-00388	3122 357 00388				
FM23/FM24	Monitor-P.W.			FM23GB-1.2-00263	3122 357 00263			FM23GB-1.3-00264	3122 357 00264
FM23/FM24	Monitor-P.W.			FM23GB-1.3-00264	3122 357 00264			FM23GB-1.3-00265	3122 357 00265
FM23/FM24	Monitor-P.W.			FM23GB-1.3-00265	3122 357 00265			FM23GA-1.5-00267	3122 357 00267
FM23/FM24/FM33	Monitor-P.W.			FM23GA-1.5-00267	3122 357 00267			FM23GA-1.7-00269	3122 357 00269
FM23/FM24/FM33	Monitor-P.W.			FM23GA-1.7-00269	3122 357 00269			FM23GA-1.7-00421	3122 357 00421
FM23/FM24/FM33	Monitor-P.W.			FM23GA-1.7-00421	3122 357 00421			FM23GA-2.0-00422	3122 357 00422
FM23/FM24/FM242/FM33	Monitor-P.W.			FM23GA-2.0-00422	3122 357 00422		First release FM2.42	FM23GA-2.1-00423	3122 357 00423
FM23/FM24/FM242/FM33	Monitor-P.W.			FM23GA-2.1-00423	3122 357 00423			FM23GA-2.2-00424	3122 357 00424
FM23/FM24/FM242/FM33	Monitor-P.W.			FM23GA-2.2-00424	3122 357 00424			FM23GA-2.3-00426	3122 357 00426
FM23/FM24/FM242/FM33	Monitor-P.W.			FM23GA-2.3-00426	3122 357 00426			-	-
FM23/FM24/FM242/FM33	Monitor-P.W.			FM23GA-2.4-00427	3122 357 00427			-	-

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								IDENT	SERVICE CODE
FM23/FM24/FM242/FM33	Monitor-P.W.			FM23GA-3.0-00521	3122 357 00521		Only for new PixelWorks 164B.		
FM23/FM24/FM242/FM33	Monitor-P.W.			FM23GA-3.2-00523	3122 357 00523		Only for new PixelWorks 164B.		
FM23/FM24/FM242/FM33	Monitor-P.W.			FM23GA-3.3-00524	3122 357 00524		Only for new PixelWorks 164B.		
FM23/FM24	Monitor-EPLD basic			FM23GB-1.0-00023	3122 357 00283			FM23GB-2.4-00284	3122 357 00284
FM23/FM24	Monitor-EPLD basic			FM23GB-2.4-00284	3122 357 00284			FM23GB-2.9-00285	3122 357 00285
FM23/FM24	Monitor-EPLD basic			FM23GB-2.9-00285	3122 357 00285			FM23GB-3.2-00286	3122 357 00286
FM23/FM24	Monitor-EPLD basic			FM23GB-3.2-00286	3122 357 00286			FM23GB-3.7-00287	3122 357 00287
FM23/FM24/FM242/FM33	Monitor-EPLD basic			FM23GB-3.7-00287	3122 357 00287			FM23GB2400511	3122 357 00511
FM23/FM24/FM242/FM33	Monitor-EPLD basic			FM23GB-3.5-00511	3122 357 00511				
FM23/FM24/FM242/FM33	Monitor-EPLD basic			FM23GB-3.6-06391	3104 317 06391				
FM23/FM24	Monitor-EPLD enhanced			FM23GB-5.0-00401	3122 357 00401			FM23GB-5.1-00402	3122 357 00402
FM23/FM24	Monitor-EPLD enhanced			FM23GB-5.1-00402	3122 357 00402			FM23GB-5.2-00403	3122 357 00403
FM23/FM24	Monitor-EPLD enhanced			FM23GB-5.2-00403	3122 357 00403			FM23GB-5.3-00404	3122 357 00404
FM23/FM24	Monitor-EPLD enhanced			FM23GB-5.3-00404	3122 357 00404			FM23GB-5.4-00405	3122 357 00405
FM23/FM24	Monitor-EPLD enhanced			FM23GB-5.4-00405	3122 357 00405			FM23GB-5.5-00406	3122 357 00406
FM23/FM24	Monitor-EPLD enhanced			FM23GB-5.5-00406	3122 357 00406			FM23GB-5.7-00407	3122 357 00407
FM23/FM24/FM242/FM33	Monitor-EPLD enhanced			FM23GB-5.7-00407	3122 357 00407			FM23GB2400501	3122 357 00501
FM23/FM24/FM242/FM33	Monitor-EPLD enhanced			FM23GB2400501	3122 357 00501				
FM23/FM24/FM242/FM33	Monitor-EPLD enhanced			FM23GB-6.1-06381	3122 357 06381				
FM23/FM24/FM33	Monitor-DDC 7904				3122 357 00301				3122 357 00311
FM23/FM24/FM33	Monitor-DDC 7907				3122 357 00311				3122 357 00371
FM23/FM24/FM33	Monitor-DDC DVI 7215				3122 357 00371				
FM242	Monitor-OTC			FM242G-1.1-00452	3122 357 00452		First release	FM242G-1.2-00453	3122 357 00453
FM242	Monitor-OTC			FM242G-1.2-00453	3122 357 00453			FM242G-1.3-00454	3122 357 00454
FM242	Monitor-OTC			FM242G-1.3-00454	3122 357 00454				
FTL13E/A	uP			TL13EU_1.0_05061	3104 317 05061		EPLD version displayed in SAM	TL13EU_1.1_05071	3104 317 05071
FTL13E/A	uP			TL13EU_1.1_05071	3104 317 05071			TL13EU_1.2_05231	3104 317 05231
FTL13E/A	uP			TL13EU_1.2_05231	3104 317 05231			TL13EU_1.3_05241	3104 317 05241
FTL13E/A	uP			TL13EU_1.3_05241	3104 317 05241			TL13EU_1.4_05371	3104 317 05371
FTL13E/A	uP			TL13EU_1.4_05371	3104 317 05371		Solved: Correct size of OSD, virgin menu refresh problem	TL13EU_1.7_05731	3104 317 05731
FTL13E/A	uP	AG 01		TL13EU_1.7_05731	3104 317 05731		Solved: Ontimer issue for AP	TL13EU_1.9_05751	3104 317 05751
FTL13E/A	uP	AG 02		TL13EU_1.8_05741	3104 317 05741		**Only for AP**. Solved: SCART2 removed from menu.	TL13EU_1.A_05911	3104 317 05911
FTL13E/A	uP	AG xB		TL13EU_1.9_05751	3104 317 05751		Solved: Black bar during start-up.	TL13EU_1.B_06181	3104 317 06181
FTL13E/A	uP	AG xB		TL13EU_1.A_05911	3104 317 05911		**Only for AP**. Solved: Black bar during start-up.	TL13EU_1.B_06181	3104 317 06181
FTL13E/A	uP	AG xC		TL13EU_1.B_06181	3104 317 06181		Macrovision solution on externals (together with SSB pwb .6)	TL13EU_1.C_06211	3104 317 06211
FTL13E/A	uP			TL13EU_1.C_06211	3104 317 06211				
FTL13E/A	uP			TL13EU_2.0_06771	3104 317 06771		**Only for India.** Solved: Sound interruptions with overmodulated signals (service solution).		
FTL13U	uP			TL13US_1.1_05091	3104 317 05091			TL13US_1.1_05091	3104 317 05091
FTL13U	uP	AG A		TL13US_1.3_05561	3104 317 05561			TL13US_1.3_05561	3104 317 05561
FTL13U	uP	AG B		TL13US_1.4_05571	3104 317 05571		Solved: Black bar during start-up.	TL13US_1.4_05571	3104 317 05571
FTL13U	uP		AG xB for Latam and AG xC for US	TL13US_1.5_05791	3104 317 05791		Suitable for LATAM sets via option codes, option code 4 for tuner TEDE9 is changed from 00008 into 00000	TL13US_1.5_05791	3104 317 05791
FTL13U	uP			TL13US_1.6_06191	3104 317 06191		Solved: Portuguese translation errors and some ITV issues.		
FTL13U	uP			TL13US_2.0_06541	3104 317 06541				
FTL13E/A/U	FBX			RE1F2_FTV_INT_04	3104 317 45331			RE1F2_FTV_INT_05	3104 317 45441
FTL13E/A/U	FBX			RE1F2_FTV_INT_05	3104 317 45441			RE1F2_FTV_INT_06	3104 317 45521
FTL13E/A/U	FBX			RE1F2_FTV_INT_06	3104 317 45521				
FTL13E/A	DDC (VGA)			LCD30_EUR_XGA	3104 317 05161				
FTL13U	DDC (DVI)			LCD30-US	3104 317 05171		First release		
FTL13E/A/U	EPLD (Cyclone)			R_CYCLONE_30LCD_E_01	3104 317 05181		First release	R_CYCLONE_30LCD_E_02	3104 317 05281
FTL13E/A/U	EPLD (Cyclone)			R_CYCLONE_30LCD_E_02	3104 317 05281		Solved: Horizontal lines in vertical colour transients	R_CYCLONE_30LCD_E_03	3104 317 05341
FTL13E/A/U	EPLD (Cyclone)			R_CYCLONE_30LCD_E_03	3104 317 05341		Solved: Macro vision detection implemented for 2fH/3fH inputs, contrast reserve measurement excludes subtitles to avoid pumpig.	R_CYCLONE_30LCD_E_04	3104 317 05511
FTL13E/A/U	EPLD (Cyclone)			R_CYCLONE_30LCD_E_04	3104 317 05511		Solved: 2fH pulse inverted to allow correct detection of macrovision, Australian 50Hz HD format (1080i letterboxed in 1152) is working correctly		
FTL2.1A	OTC			TX21AP_1.0_06141	3104 317 06141			TX21AP_1.1_06151	3104 317 06151
FTL2.1A	OTC			TX21AP_1.1_06151	3104 317 06151			TX21AP_1.2_07701	3104 317 07701
FTL2.1A	OTC			TX21AP_1.2_07701	3104 317 07701				
FTL2.1A	OTC			TX21AP_1.3_07761	3104 317 07761				
FTL2.1A	OTC			TX21AP_2.0_09431	3104 317 09431		Sound interuptions India due to overmodulated signals		
FTL2.1A	OTC			TX21AP_3.0_09521	3104 317 09521		Service solution: no picture or sound		
FTL2.1E	OTC			TX21EU_1.0_06121	3104 317 06121			TX21EU_1.1_06131	3104 317 06131
FTL2.1E	OTC			TX21EU_1.1_06131	3104 317 06131			TX21EU_1.2_06901	3104 317 06901
FTL2.1E	OTC			TX21EU_1.2_06901	3104 317 06901			TX21EU_1.3_06921	3104 317 06921

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								IDENT	SERVICE CODE
FTL2.1E	OTC			TX21EU_1.3_06921	3104 317 06921			TX21EU_1.4_07021	3104 317 07021
FTL2.1E	OTC			TX21EU_1.4_07021	3104 317 07021			TX21EU_1.5_07031	3104 317 07031
FTL2.1E	OTC			TX21EU_1.5_07031	3104 317 07031			TX21EU_1.6_07181	3104 317 07181
FTL2.1E	OTC			TX21EU_1.6_07181	3104 317 07181			TX21EU_2.0_07301	3104 317 07301
FTL2.1E	OTC			TX21EU_2.0_07301	3104 317 07301		Solved: YPbPr on 1080, Split picture when PC is connected.	TX21EU_2.1_07411	3104 317 07411
FTL2.1E	OTC			TX21EU_2.1_07411	3104 317 07411			TX21EU_2.2_07771	3139 317 07771
FTL2.1E	OTC			TX21EU_2.2_07771	3104 317 07771				
FTL2.1U	OTC			TX21US_1.0_06161	3104 317 06161			TX21US_1.1_06171	3104 317 06171
FTL2.1U	OTC			TX21US_1.1_06171	3104 317 06171			TX21US_1.2_07241	3104 317 07241
FTL2.1U	OTC			TX21US_1.2_07241	3104 317 07241			TX21US_1.3_07251	3104 317 07251
FTL2.1U	OTC			TX21US_1.3_07251	3104 317 07251			TX21US_1.4_07421	3104 317 07421
FTL2.1U	OTC			TX21US_1.4_07421	3104 317 07421			TX21US_1.5_07431	3104 317 07431
FTL2.1U	OTC			TX21US_1.5_07431	3104 317 07431			TX21US_1.6_07441	3104 317 07441
FTL2.1U	OTC			TX21US_1.6_07441	3104 317 07441			TX21US_1.7_07551	3104 317 07551
FTL2.1U	OTC			TX21US_1.7_07551	3104 317 07551			TX21US_1.8_07581	3104 317 07581
FTL2.1U	OTC			TX21US_1.8_07581	3104 317 07581			TX21US_1.9_07911	3104 317 07911
FTL2.1U	OTC			TX21US_1.9_07911	3104 317 07911				
FTL2.1E/A/U	FBX (5V IC voltage)		27C512	RE1C_COL_FTV_INT01	3104 317 46651		First release	RE1C_COL_FTV_INT03	3104 317 47011
FTL2.1E/A/U	FBX (5V IC voltage)		27C512	RE1C_COL_FTV_INT03	3104 317 47011			RE1C_COL_FTV_INT04	3104 317 47071
FTL2.1E/A/U	FBX (5V IC voltage)		27C512	RE1C_COL_FTV_INT04	3104 317 47071			RE1C_COL_FTV_INT06	3104 317 47321
FTL2.1E/A/U	FBX (5V IC voltage)		27C512	RE1C_COL_FTV_INT06	3104 317 47321			RE1C_COL_FTV_INT08	3104 317 47471
FTL2.1E/A/U	FBX (5V IC voltage)		27C512	RE1C_COL_FTV_INT08	3104 317 47471			RE1C_COL_FTV_INT09	3104 317 47591
FTL2.1E/A/U	FBX (5V IC voltage)		27C512	RE1C_COL_FTV_INT09	3104 317 47591		YPbPr on 1080	RE1C_COL_FTV_INT10	3104 317 47611
FTL2.1E/A/U	FBX (5V IC voltage)		27C512	RE1C_COL_FTV_INT10	3104 317 47611				
FTL2.1E/A/U	FBX (3V3 IC voltage)		M27W512	RE1C_COL_FTV_INT04	3104 317 47311			RE1C_COL_FTV_INT09	3104 317 47601
FTL2.1E/A/U	FBX (3V3 IC voltage)		M27W512	RE1C_COL_FTV_INT09	3104 317 47601			RE1C_COL_FTV_INT10	3104 317 47621
FTL2.1E/A/U	FBX (3V3 IC voltage)		M27W512	RE1C_COL_FTV_INT10	3104 317 47621				
FTL2.1E/A	EPLD 32"/37"/42" LCD, 42"/50" PDP SDI HD			R_FTV_2004_76_29	3104 317 06941		First release	R_FTV_2004_76_43	3104 317 07651
FTL2.1E/A	EPLD 32"/37"/42" LCD, 42"/50" PDP SDI HD			R_FTV_2004_76_43	3104 317 07651			R_FTV_2004_76_45	3104 317 07721
FTL2.1E/A	EPLD 32"/37"/42" LCD, 42"/50" PDP SDI HD			R_FTV_2004_76_45	3104 317 07721			R_FTV_2004_76_47	3104 317 07861
FTL2.1E/A	EPLD 32"/37"/42" LCD, 42"/50" PDP SDI HD			R_FTV_2004_76_47	3104 317 07861			R_FTV_2004_76_49	3104 317 07861
FTL2.1E/A	EPLD 32"/37"/42" LCD, 42"/50" PDP SDI HD			R_FTV_2004_76_49	3104 317 09821				
FTL2.1E	EPLD 37"/42" PDP FHP			R_FTV_2004_48_30	3104 317 06991		First release	R_FTV_2004_48_31	3104 317 07541
FTL2.1E	EPLD 37"/42" PDP FHP			R_FTV_2004_48_31	3104 317 07541			R_FTV_2004_48_46	3104 317 07751
FTL2.1E	EPLD 37"/42" PDP FHP			R_FTV_2004_48_46	3104 317 07751			R_FTV_2004_48_47	3104 317 07871
FTL2.1E	EPLD 37"/42" PDP FHP			R_FTV_2004_48_47	3104 317 07871			R_FTV_2004_48_49	3104 317 09681
FTL2.1E	EPLD 37"/42" PDP FHP			R_FTV_2004_48_49	3104 317 09681				
FTL2.1E/A	EPLD 37"/42" PDP SDI SD			R_FTV_2004_32_45	3104 317 07731			R_FTV_2004_32_47	3104 317 07881
FTL2.1E/A	EPLD 37"/42" PDP SDI SD			R_FTV_2004_32_47	3104 317 07881			R_FTV_2004_32_49	3104 317 09811
FTL2.1E/A	EPLD 37"/42" PDP SDI SD			R_FTV_2004_32_49	3104 317 09811				
FTL2.1U	EPLD 37"/42" PDP FHP			R_FTV_2004_48_30	3104 317 06991		First release	R_FTV_2004_48_31	3104 317 07541
FTL2.1U	EPLD 37"/42" PDP FHP			R_FTV_2004_48_31	3104 317 07541			R_FTV_2004_48_46	3104 317 07751
FTL2.1U	EPLD 37"/42" PDP FHP			R_FTV_2004_48_46	3104 317 07751			R_FTV_2004_48_47	3104 317 07871
FTL2.1U	EPLD 37"/42" PDP FHP			R_FTV_2004_48_47	3104 317 07871			R_FTV_2004_48_49	3104 317 09681
FTL2.1U	EPLD 37"/42" PDP FHP			R_FTV_2004_48_49	3104 317 09681				
FTL2.1U	EPLD 32"/37"/42" LCD, 42"/50" PDP SDI HD			R_FTV_2004_76_38	3104 317 06911		First release	R_FTV_2004_76_40	3104 317 07041
FTL2.1U	EPLD 32"/37"/42" LCD, 42"/50" PDP SDI HD			R_FTV_2004_76_40	3104 317 07041			R_FTV_2004_76_45	3104 317 07721
FTL2.1U	EPLD 32"/37"/42" LCD, 42"/50" PDP SDI HD			R_FTV_2004_76_45	3104 317 07721			R_FTV_2004_76_47	3104 317 07861
FTL2.1U	EPLD 32"/37"/42" LCD, 42"/50" PDP SDI HD			R_FTV_2004_76_47	3104 317 07861			R_FTV_2004_76_49	3104 317 09821
FTL2.1U	EPLD 32"/37"/42" LCD, 42"/50" PDP SDI HD			R_FTV_2004_76_49	3104 317 09821				
FTL2.1E	EDID			EDID EU	3104 317 06591		First release		
FTL2.1E	EDID			EDID US/AP	3104 317 06611		First release		
FTL2.1E	EDID			EDID EU no 3fh	3104 317 06601		First release		
FTL2.1A/U	EDID			EDID US/AP no 3fh	3104 317 06621			EDID US/AP no 3fh	3104 317 06621
FTL2.1A/U	EDID			EDID US/AP no 3fh	3104 317 06622				
FTL2.2A	OTC			TX21AP_1.0_06141	3104 317 06141			TX21AP_1.1_06151	3104 317 06151
FTL2.2A	OTC			TX21AP_1.1_06151	3104 317 06151			TX21AP_1.2_07701	3104 317 07701
FTL2.2A	OTC			TX21AP_1.2_07701	3104 317 07701				
FTL2.2A	OTC			TX21AP_1.3_07761	3104 317 07761				
FTL2.2A	OTC			TX21AP_2.0_09431	3104 317 09431		Sound interuptions India due to overmodulated signals		
FTL2.2A	OTC			TX21AP_3.0_09521	3104 317 09521		Service solution: no picture or sound		
FTL2.2U	OTC			TX21US_1.0_06161	3104 317 06161			TX21US_1.1_06171	3104 317 06171
FTL2.2U	OTC			TX21US_1.1_06171	3104 317 06171			TX21US_1.2_07241	3104 317 07241
FTL2.2U	OTC			TX21US_1.2_07241	3104 317 07241			TX21US_1.3_07251	3104 317 07251
FTL2.2U	OTC			TX21US_1.3_07251	3104 317 07251			TX21US_1.4_07421	3104 317 07421
FTL2.2U	OTC			TX21US_1.4_07421	3104 317 07421			TX21US_1.5_07431	3104 317 07431
FTL2.2U	OTC			TX21US_1.5_07431	3104 317 07431			TX21US_1.6_07441	3104 317 07441
FTL2.2U	OTC			TX21US_1.6_07441	3104 317 07441			TX21US_1.7_07551	3104 317 07551
FTL2.2U	OTC			TX21US_1.7_07551	3104 317 07551			TX21US_1.8_07581	3104 317 07581
FTL2.2U	OTC			TX21US_1.8_07581	3104 317 07581			TX21US_1.9_07911	3104 317 07911
FTL2.2U	OTC			TX21US_1.9_07911	3104 317 07911				

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CHASSIS	FAMILY	PRODUCTION CODE	uP TYPE/VERSION	IDENT	SERVICE CODE	HOTEL MODE ?	REMARKS TYPICAL FOR THIS SOFTWARE	REPLACED BY	
								IDENT	SERVICE CODE
FTL2.2A/U	FBX		27C512	RE1C_COL_FTV_INT01	3104 317 46651		First release	RE1C_COL_FTV_INT03	3104 317 47011
FTL2.2A/U	FBX		27C512	RE1C_COL_FTV_INT03	3104 317 47011			RE1C_COL_FTV_INT04	3104 317 47071
FTL2.2A/U	FBX		27C512	RE1C_COL_FTV_INT04	3104 317 47071			RE1C_COL_FTV_INT06	3104 317 47321
FTL2.2A/U	FBX		27C512	RE1C_COL_FTV_INT06	3104 317 47321			RE1C_COL_FTV_INT08	3104 317 47471
FTL2.2A/U	FBX		27C512	RE1C_COL_FTV_INT08	3104 317 47471			RE1C_COL_FTV_INT09	3104 317 47591
FTL2.2A/U	FBX		27C512	RE1C_COL_FTV_INT09	3104 317 47591		YPbPr on 1080	RE1C_COL_FTV_INT10	3104 317 47611
FTL2.2A/U	FBX		27C512	RE1C_COL_FTV_INT10	3104 317 47611				
FTL2.2A/U	FBX		M27W512	RE1C_COL_FTV_INT04	3104 317 47311			RE1C_COL_FTV_INT09	3104 317 47601
FTL2.2A/U	FBX		M27W512	RE1C_COL_FTV_INT09	3104 317 47601			RE1C_COL_FTV_INT10	3104 317 47621
FTL2.2A/U	FBX		M27W512	RE1C_COL_FTV_INT10	3104 317 47621				
FTL2.2A	EPLD 32"/37"/42" LCD, 42"/50" PDP SDI HD			R_FTV_2004_76_29	3104 317 06941		First release	R_FTV_2004_76_43	3104 317 07651
FTL2.2A	EPLD 32"/37"/42" LCD, 42"/50" PDP SDI HD			R_FTV_2004_76_43	3104 317 07651			R_FTV_2004_76_45	3104 317 07721
FTL2.2A	EPLD 32"/37"/42" LCD, 42"/50" PDP SDI HD			R_FTV_2004_76_45	3104 317 07721			R_FTV_2004_76_47	3104 317 07861
FTL2.2A	EPLD 32"/37"/42" LCD, 42"/50" PDP SDI HD			R_FTV_2004_76_47	3104 317 07861			R_FTV_2004_76_49	3104 317 09821
FTL2.2A	EPLD 32"/37"/42" LCD, 42"/50" PDP SDI HD			R_FTV_2004_76_49	3104 317 09821				
FTL2.2U	EPLD 32"/37"/42" LCD, 42"/50" PDP SDI HD			R_FTV_2004_76_38	3104 317 06911		First release	R_FTV_2004_76_40	3104 317 07041
FTL2.2U	EPLD 32"/37"/42" LCD, 42"/50" PDP SDI HD			R_FTV_2004_76_40	3104 317 07041			R_FTV_2004_76_45	3104 317 07721
FTL2.2U	EPLD 32"/37"/42" LCD, 42"/50" PDP SDI HD			R_FTV_2004_76_45	3104 317 07721			R_FTV_2004_76_47	3104 317 07861
FTL2.2U	EPLD 32"/37"/42" LCD, 42"/50" PDP SDI HD			R_FTV_2004_76_47	3104 317 07861			R_FTV_2004_76_49	3104 317 09821
FTL2.2U	EPLD 32"/37"/42" LCD, 42"/50" PDP SDI HD			R_FTV_2004_76_49	3104 317 09821				
FTL2.2A/U	DDC HDMI			EDID US/AP	3104 317 06611		First release		
FTL3.1E	Viper			TL31E_1.0_07281	3104 317 07281			TL31E_1.1_07291	3104 317 07291
FTL3.1E	Viper			TL31E_1.1_07291	3104 317 07291			TL31E_1.2_08161	3104 317 08161
FTL3.1E	Viper			TL31E_1.2_08161	3104 317 08161			TL31E_1.3_08171	3104 317 08171
FTL3.1E	Viper			TL31E_1.3_08171	3104 317 08171				
FTL3.1E	Standby		P89C557E4EFB/01	SBY PROC 3.0 (003.000)	3104 317 07381			SBY PROC 3.1	3104 317 07391
FTL3.1E	Standby	Start production	P89C557E4EFB/01	SBY PROC 3.1 (003.001)	3104 317 07391		Start production		
FTL3.1E	DDC HDMI			JAG ANA 2K4 V20	3104 317 06633				
FTP1.1E/A	uP	Start production		TP11EU_1.2_05761	3104 317 05761			TP11EU_1.3_05811	3104 317 05811
FTP1.1E/A	uP			TP11EU_1.3_05811	3104 317 05811			TP11EU_1.4_05821	3104 317 05821
FTP1.1E/A	uP			TP11EU_1.4_05821	3104 317 05821			TP11EU_1.5_05871	3104 317 05871
FTP1.1E/A	uP	From week 0350		TP11EU_1.5_05871	3104 317 05871		DW/TXT function added	TP11EU_1.6_05921	3104 317 05921
FTP1.1E/A	uP			TP11EU_1.6_05921	3104 317 05921				
FTP1.1E/A	uP			TP11EU_2.0_08821	3104 317 08821		Sound interuptions India due to overmodulated signals		
FTP1.1U	uP			TP11US_1.0_05411	3104 317 05411		First release		
FTP1.1E/A/U	FBX	Start production		RE1F2_FTV_INT_06	3104 317 45521				
FTP1.1U	DDC (DVI)			PDP30-US	3104 317 05651				
FTP1.1E/A/U	EPLD (Cyclone)			PDP42_E_02	3104 317 05801		First release	PDP42_E_03	3104 317 05891
FTP1.1E/A/U	EPLD (Cyclone)			PDP42_E_03	3104 317 05891				
FTL2.1E/A/U/L	Ambilight			AMBI_INV_V0.7	3104 317 09401		First release		
FTP2.2A	OTC			TX21AP_1.0_06141	3104 317 06141			TX21AP_1.1_06151	3104 317 06151
FTP2.2A	OTC			TX21AP_1.1_06151	3104 317 06151			TX21AP_1.2_07701	3104 317 07701
FTP2.2A	OTC			TX21AP_1.2_07701	3104 317 07701				
FTP2.2A	OTC			TX21AP_1.3_07761	3104 317 07761				
FTP2.2A	OTC			TX21AP_2.0_09431	3104 317 09431		Service solution: Sound interuptions India due to overmodulated signals		
FTP2.2A	OTC			TX21AP_3.0_09521	3104 317 09521		Service solution: no picture or sound		
FTP2.2E	OTC			TX21EU_1.0_06121	3104 317 06121			TX21EU_1.1_06131	3104 317 06131
FTP2.2E	OTC			TX21EU_1.1_06131	3104 317 06131			TX21EU_1.2_06901	3104 317 06901
FTP2.2E	OTC			TX21EU_1.2_06901	3104 317 06901			TX21EU_1.3_06921	3104 317 06921
FTP2.2E	OTC			TX21EU_1.3_06921	3104 317 06921			TX21EU_1.4_07021	3104 317 07021
FTP2.2E	OTC			TX21EU_1.4_07021	3104 317 07021			TX21EU_1.5_07031	3104 317 07031
FTP2.2E	OTC			TX21EU_1.5_07031	3104 317 07031			TX21EU_1.6_07181	3104 317 07181
FTP2.2E	OTC			TX21EU_1.6_07181	3104 317 07181			TX21EU_2.0_07301	3104 317 07301
FTP2.2E	OTC			TX21EU_2.0_07301	3104 317 07301		Solved: YPbPr on 1080, Split picture when PC is connected.	TX21EU_2.1_07411	3104 317 07411
FTP2.2E	OTC			TX21EU_2.1_07411	3104 317 07411				
FTP2.2E	OTC			TX21EU_2.2_07771	3104 317 07771				
FTP2.2U	OTC			TX21US_1.0_06161	3104 317 06161			TX21US_1.1_06171	3104 317 06171
FTP2.2U	OTC			TX21US_1.1_06171	3104 317 06171			TX21US_1.2_07241	3104 317 07241
FTP2.2U	OTC			TX21US_1.2_07241	3104 317 07241			TX21US_1.3_07251	3104 317 07251
FTP2.2U	OTC			TX21US_1.3_07251	3104 317 07251			TX21US_1.4_07421	3104 317 07421
FTP2.2U	OTC			TX21US_1.4_07421	3104 317 07421			TX21US_1.5_07431	3104 317 07431
FTP2.2U	OTC			TX21US_1.5_07431	3104 317 07431			TX21US_1.6_07441	3104 317 07441
FTP2.2U	OTC			TX21US_1.6_07441	3104 317 07441			TX21US_1.7_07551	3104 317 07551
FTP2.2U	OTC			TX21US_1.7_07551	3104 317 07551			TX21US_1.8_07581	3104 317 07581
FTP2.2U	OTC			TX21US_1.8_07581	3104 317 07581			TX21US_1.9_07911	3104 317 07911
FTP2.2U	OTC			TX21US_1.9_07911	3104 317 07911				

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CHASSIS	FAMILY	PRODUCTION CODE	uP TYPE/VERSION	IDENT	SERVICE CODE	HOTEL MODE ?	REMARKS TYPICAL FOR THIS SOFTWARE	REPLACED BY	
								IDENT	SERVICE CODE
FTP2.2E/A/U	FBX		27C512	RE1C_COL_FTV_INT01	3104 317 46651		First release	RE1C_COL_FTV_INT03	3104 317 47011
FTP2.2E/A/U	FBX		27C512	RE1C_COL_FTV_INT03	3104 317 47011			RE1C_COL_FTV_INT04	3104 317 47071
FTP2.2E/A/U	FBX		27C512	RE1C_COL_FTV_INT04	3104 317 47071			RE1C_COL_FTV_INT06	3104 317 47321
FTP2.2E/A/U	FBX		27C512	RE1C_COL_FTV_INT06	3104 317 47321			RE1C_COL_FTV_INT08	3104 317 47471
FTP2.2E/A/U	FBX		27C512	RE1C_COL_FTV_INT08	3104 317 47471			RE1C_COL_FTV_INT09	3104 317 47591
FTP2.2E/A/U	FBX		27C512	RE1C_COL_FTV_INT09	3104 317 47591		YPbPr on 1080	RE1C_COL_FTV_INT10	3104 317 47611
FTP2.2E/A/U	FBX		27C512	RE1C_COL_FTV_INT10	3104 317 47611				
FTP2.2E/A/U	FBX		M27W512	RE1C_COL_FTV_INT04	3104 317 47311			RE1C_COL_FTV_INT09	3104 317 47601
FTP2.2E/A/U	FBX		M27W512	RE1C_COL_FTV_INT09	3104 317 47601			RE1C_COL_FTV_INT10	3104 317 47621
FTP2.2E/A/U	FBX		M27W512	RE1C_COL_FTV_INT10	3104 317 47621				
FTP2.2E/A	EPLD 32"/37"/42" LCD, 42"/50" PDP SDI HD			R_FTV_2004_76_29	3104 317 06941		First release	R_FTV_2004_76_43	3104 317 07651
FTP2.2E/A	EPLD 32"/37"/42" LCD, 42"/50" PDP SDI HD			R_FTV_2004_76_43	3104 317 07651			R_FTV_2004_76_45	3104 317 07721
FTP2.2E/A	EPLD 32"/37"/42" LCD, 42"/50" PDP SDI HD			R_FTV_2004_76_45	3104 317 07721			R_FTV_2004_76_47	3104 317 07861
FTP2.2E/A	EPLD 32"/37"/42" LCD, 42"/50" PDP SDI HD			R_FTV_2004_76_47	3104 317 07861			R_FTV_2004_76_49	3104 317 09821
FTP2.2E/A	EPLD 32"/37"/42" LCD, 42"/50" PDP SDI HD			R_FTV_2004_76_49	3104 317 09821				
FTP2.2E	EPLD 37"/42" PDP FHP			R_FTV_2004_48_30	3104 317 06991		First release	R_FTV_2004_48_31	3104 317 07541
FTP2.2E	EPLD 37"/42" PDP FHP			R_FTV_2004_48_31	3104 317 07541			R_FTV_2004_48_46	3104 317 07751
FTP2.2E	EPLD 37"/42" PDP FHP			R_FTV_2004_48_46	3104 317 07751			R_FTV_2004_48_47	3104 317 07871
FTP2.2E	EPLD 37"/42" PDP FHP			R_FTV_2004_48_47	3104 317 07871			R_FTV_2004_48_49	3104 317 09681
FTP2.2E	EPLD 37"/42" PDP FHP			R_FTV_2004_48_49	3104 317 09681				
FTP2.2E/A	EPLD 37"/42" PDP SDI SD			R_FTV_2004_32_45	3104 317 07731			R_FTV_2004_32_47	3104 317 07881
FTP2.2E/A	EPLD 37"/42" PDP SDI SD			R_FTV_2004_32_47	3104 317 07881			R_FTV_2004_32_49	3104 317 09811
FTP2.2E/A	EPLD 37"/42" PDP SDI SD			R_FTV_2004_32_49	3104 317 09811				
FTP2.2U	EPLD 37"/42" PDP FHP			R_FTV_2004_48_30	3104 317 06991		First release	R_FTV_2004_48_31	3104 317 07541
FTP2.2U	EPLD 37"/42" PDP FHP			R_FTV_2004_48_31	3104 317 07541			R_FTV_2004_48_46	3104 317 07751
FTP2.2U	EPLD 37"/42" PDP FHP			R_FTV_2004_48_46	3104 317 07751			R_FTV_2004_48_47	3104 317 07871
FTP2.2U	EPLD 37"/42" PDP FHP			R_FTV_2004_48_47	3104 317 07871			R_FTV_2004_48_49	3104 317 09681
FTP2.2U	EPLD 37"/42" PDP FHP			R_FTV_2004_48_49	3104 317 09681				
FTP2.2U	EPLD 32"/37"/42" LCD, 42"/50" PDP SDI HD			R_FTV_2004_76_38	3104 317 06911		First release	R_FTV_2004_76_40	3104 317 07041
FTP2.2U	EPLD 32"/37"/42" LCD, 42"/50" PDP SDI HD			R_FTV_2004_76_40	3104 317 07041			R_FTV_2004_76_45	3104 317 07721
FTP2.2U	EPLD 32"/37"/42" LCD, 42"/50" PDP SDI HD			R_FTV_2004_76_45	3104 317 07721			R_FTV_2004_76_47	3104 317 07861
FTP2.2U	EPLD 32"/37"/42" LCD, 42"/50" PDP SDI HD			R_FTV_2004_76_47	3104 317 07861			R_FTV_2004_76_49	3104 317 09821
FTP2.2U	EPLD 32"/37"/42" LCD, 42"/50" PDP SDI HD			R_FTV_2004_76_49	3104 317 09821				
FTP2.2E	EDID			EDID EU	3104 317 06591		First release		
FTP2.2E	EDID			EDID US/AP	3104 317 06611		First release		
FTP2.2E	EDID			EDID EU no 3fh	3104 317 06601		First release		
FTP2.2A/U	EDID			EDID US/AP no 3fh	3104 317 06621			EDID US/AP no 3fh	3104 317 06621
FTP2.2A/U	EDID			EDID US/AP no 3fh	3104 317 06622				
FTL2.2E/A/U/L	Ambilight			AMBI_INV_V0.7	3104 317 09401		First release		
FTV1.9DE	Monitor	Start production	EPC1441 PC8	F19DW2.0_00071	3122 357 40021	No	PDP-Limesco position 7357	F19DW2.0_00074	3122 357 40024
FTV1.9DE	Monitor	AG01 and higher	EPC1441 PC8	F19DW2.0_00072	3122 357 40022	No	PDP-Limesco position 7357	F19DW2.0_00074	3122 357 40024
FTV1.9DE	Monitor	AG02 and higher, week 9948 and higher	EPC1441 PC8	F19DW2.0_00074	3122 357 40024	No	PDP-Limesco position 7357, introduction Y/C panel - not in TV configuration	F19DW2.0_00075	3122 357 40025
FTV1.9DE	Monitor		EPC1441 PC8	F19DG11.0_00131	3122 357 40081	No	PDP-Limesco position 7357 - only in TV-configuration		
FTV1.9DE	Monitor	AG06 and higher, week 0018 and higher	EPC1441 PC8	F19DW2.0_00075	3122 357 40025	No	PDP-Limesco position 7357 - introduction SW for Monitor- & TV-configuration		
FTV1.9DE	Monitor	Start production	PC87C695AER/C1	F19DE11.1_00062	3122 357 40042	No	MUP Panel .1 version - postion 7001	F19DE12.0_00063	3122 357 40043
FTV1.9DE	Monitor	AG02 and higher, week 9948 and higher	PC87C695AER/C1	F19DE12.0_00063	3122 357 40043	No	MUP Panel .2 version - postion 3018 added - to be used with PDP-OTP 3122 357 40024	F19DE12.1_00064	3122 357 40044
FTV1.9DE	Monitor	From week 9950 and higher	PC87C695AER/C1	F19DE12.1_00064	3122 357 40044	No	Only for monitors - to be used with PDP OTP 3122 357 40024, improvement of VCR jitter with NTSC	F19DE12.1_00065	3122 357 40045
FTV1.9DE	Monitor	AG06 and higher, week 0018 and higher	PC87C695AER/C1	F19DE12.1_00065	3122 357 40045	No	Introduction SW for Monitor- & TV-config, SW withoptionnumbers for Y/C board and sound enable available	F19DE14.0_00066	3122 357 40046
FTV1.9DE	Monitor	AG07 and higher, week 0027 and higher	PC87C695AER/C1	F19DE14.0_00066	3122 357 40046	No	Update for Marantz & 16:9 aspect ratio		
FTV1.9DE	Monitor	AG07 and higher, week	PC87C695AER/C1	F19DE15.0_00068	3122 357 40048	No			
FTV1.9DE	Monitor		PC87C695AER/C1	F19DE15.0_00411	9965 000 14396	No	Service solution: L2.5 is switched off		
FTV1.9DE	Monitor	Production start (9935)	M24C16-BN6	EAROM_00091	3122 357 40051	No	AVC position 7400	EAROM_00092	3122 357 40052
FTV1.9DE	Monitor	From week 9948	M24C16-BN6	EAROM_00092	3122 357 40052	No	AVC position 7400 - AG02 code - introduction Y/C panel	EAROM_00095	3122 357 40055
FTV1.9DE	Monitor	From week 0018	M24C16-BN6	EAROM_00095	3122 357 40055	No	AVC position 7400 - AG06 code - introduction SW for Monitor- & TV-config.		
FTV1.9EE	E-Box, FBX4		87C654-4B44	FBX4 V1.5	3104 317 01211	No		FTV1.9_00112	3122 357 40062
FTV1.9EE	E-Box, FBX6		M27C512-90-C1	FTV1.9_00111	3122 357 40061	No		FTV1.9_00112	3122 357 40062
FTV1.9EE	E-Box, FBX6		M27C512-90-C1	FTV1.9_00112	3122 357 40062	No			
FTV1.9EE	E-Box/FBX4 - West Europe	Start production	M27C801-100F1	F19EE11.2_00052	3122 357 40032	No		F19EE11.3_00054	3122 357 40034

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CHASSIS	FAMILY	PRODUCTION CODE	uP TYPE/VERSION	IDENT	SERVICE CODE	HOTEL MODE ?	REMARKS TYPICAL FOR THIS SOFTWARE	REPLACED BY	
								IDENT	SERVICE CODE
FTV1.9EE	E-Box/FBX4 - West Europe	AG01 and higher, week 9948 and higher	M27C801-100F1	F19EE11.2_00053	3122 357 40033	No		F19EE11.3_00054	3122 357 40034
FTV1.9EE	E-Box/FBX4 - West Europe	AG02 and higher, week 0018 and higher	M27C801-100F1	F19EE11.3_00054	3122 357 40034	No	Solved switching problem between 2CS and NICAM	F19EE4.0_00055	3122 357 40035
FTV1.9EE	E-Box/FBX6 - West Europe		M27C801-100F1	F19EE4.0_00055	3122 357 40035	No	SSP position 7202 - /12S /19S /58S		
FTV1.9EE	E-Box/FBX6 - East Europe		M27C801-100F1	F19EC4.1_00201	3122 357 40111	No	SSP position 7202 - /58S		
FTV1.9EE	E-Box/FBX6 - West Europe		M27C801-100F1	F19EE4.1_00211	3122 357 40121	No	SSP position 7202 - /12S & /19S		
FTV1.9EE	E-Box - USA		M27C801-100F1	F19EU12.0_00141	3122 357 40071	No	To be used in combination with monitor software from AG06	F19EU12.1_00143	3122 357 40073
FTV1.9EE	E-Box - USA		M27C801-100F1	F19EU12.0_00142	3122 357 40072	No	To be used in combination with monitor software from AG06	F19EU12.1_00143	3122 357 40073
FTV1.9EE	E-Box - USA	AG03 and higher, week 0022 and higher	M27C801-100F1	F19EU12.1_00143	3122 357 40073	No	To be used in combination with monitor software from AG06 - unwanted sound muting solved	F19EU14.1_00144	3122 357 40074
FTV1.9EE	E-Box - USA	Week 0040 and higher	M27C801-100F1	F19EU14.1_00144	3122 357 40074	No			
FTV1.9EE	E-Box - AP		M27C801-100F1	F19EA13.0_00161	3122 357 40091	No		F19EA14.1_00163	3122 357 40093
FTV1.9EE	E-Box - AP		M27C801-100F1	F19EA14.1_00163	3122 357 40093	No			
FTV1.9EE	E-Box - Marantz		M27C801-100F1	F19EM14.1_00181	3122 357 40101	No		F19EM14.1_00182	3122 357 40102
FTV1.9EE	E-Box - Marantz		M27C801-100F1	F19EM14.1_00182	3122 357 40102	No			
L01.1A	/71, /97, NTSC, text	Wk146	TDA9588H/N1/3/0408	TDA9588_L01AC11.5	9352 694 11557			TDA9588_L01AC11.9	9352 716 28557
L01.1A	/71, /97, NTSC, text	Wk217	TDA9588H/N1/3/0835	TDA9588_L01AC11.9	9352 716 28557			-	-
L01.1A	/67, /74, multi	Wk127	TDA9586H/N1/3/0401	TDA9586_L01AN21.0	9352 694 03557			TDA9586_L01AN22.2	9352 707 03557
L01.1A	/67, /74, multi	Wk146	TDA9586H/N1/3/0627	TDA9586_L01AN22.2	9352 707 03557			TDA9586_L01AN22.7	9352 716 31557
L01.1A	/67, /74, multi	Wk245	TDA9586H/N1/3/0829	TDA9586_L01AN22.7	9352 716 31557			-	-
L01.1A		Wk336	TDA9586H/N1/3I1090	TDA9586_L01AN41.4	9352 730 05557			-	-
L01.1A		Wk336	TDA9586H/N1/3I1096	TDA9586_L01AN51.8	9352 730 07557			-	-
L01.1A	/57, /68, /69, /73, /79, multi, 10p text		TDA9565H/N1/4	TDA9565_L01AT11.3	9352 685 11557			TDA9565_L01AT11.6	9352 693 77557
L01.1A	/57, /68, /69, /73, /79, multi, 10p text	Wk125	TDA9565H/N1/4/0378	TDA9565_L01AT11.6	9352 693 77557			TDA9565_L01AT12.4	9352 707 07557
L01.1A	/57, /68, /69, /73, /79, multi, 10p text	Wk146	TDA9565H/N1/4/0631	TDA9565_L01AT12.4	9352 707 07557			TDA9565_L01AT12.9	9352 715 99557
L01.1A	/57, /68, /69, /73, /79, multi, 10p text	Wk245	TDA9565H/N1/4/0803	TDA9565_L01AT12.9	9352 715 99557			-	-
L01.1A	Middle East - 10 Page Text		TDA9565H/N1/4	TDA9565_L01AT21.0	9352 685 11557			TDA9565_L01AT21.2	9352 693 78557
L01.1A	/56, /65, multi, 10p text	Wk127	TDA9565H/N1/4/0379	TDA9565_L01AT21.2	9352 693 78557			TDA9565_L01AT22.4	9352 707 10557
L01.1A	/56, /65, multi, 10p text	Wk146	TDA9565H/N1/4/0634	TDA9565_L01AT22.4	9352 707 10557			TDA9565_L01AT22.8	9352 716 00557
L01.1A	/56, /65, multi, 10p text	Wk245	TDA9565H/N1/4/0804	TDA9565_L01AT22.8	9352 716 00557			-	-
L01.1A		Wk336	TDA9555H/N1/3I1098	TDA9555_L01AT51.6	9352 730 09557			-	-
L01.1A		Wk336	TDA9552H/N1/3I1099	TDA9552_L01AT51.6	9352 730 10557			-	-
L01.1L		Wk209	TDA9570H/N1/A/0646	TDA9570_L01LN11.2	9352 707 65557			-	-
L01.1L		Wk???	TDA9570H/N1/A/0814	TDA9570_L01LN11.4	9352 716 10557			-	-
L01.1L		Wk112	TDA9583H/N1/3/0399	TDA9583_L01LS11.3	9352 694 01557			-	-
L01.1L		Wk128	TDA9583H/N1/3/0501	TDA9583_L01LS11.4	9352 700 41557			-	-
L01.1L		Wk139	TDA9583H/N1/3/0575	TDA9583_L01LS12.0	9352 704 24557			-	-
L01.1L		Wk229	TDA9583H/N1/3/0827	TDA9583_L01LS12.2	9352 716 29557			-	-
L01.1L		Wk251	TDA9583H/N1/3I1013	TDA9583_L01LS31.2	9352 725 54557			-	-
L01.1L		Wk314	TDA9583H/N1/3I1164	TDA9583_L01LS31.3	9352 733 64557			-	-
L01.1L		Wk327	TDA9583H/N1/3I1225	TDA9583_L01LS31.6	9352 739 25557			-	-
L01.1L		Wk332	TDA9583H/N1/3I1297	TDA9583_L01LS31.7	9352 742 83557			-	-
L01.1L		Wk251	TDA9599H/N1/4I1011	TDA9599_L01LS41.3	9352 725 52557			-	-
L01.1L		Wk315	TDA9599H/N1/4I1165	TDA9599_L01LS41.4	9352 733 65557			-	-
L01.1L		Wk315	TDA9599H/N1/4I1224	TDA9599_L01LS41.8	9352 739 24557			-	-
L01.1L		Wk248	TDA9570H/N1/AI1012	TDA9570_L01LS51.0	9352 725 53557			-	-
L01.1U		Wk331	TDA9569H/N1/4I1313	TDA9569_L01UD11.4	9352 743 94557			-	-
L01.1U		Wk108	TDA9587H/N1/3/0363	TDA9587_L01UM01.1	9352 692 52557			-	-
L01.1U		Wk128	TDA9587H/N1/3/0480	TDA9587_L01UM01.3	9352 699 86557			-	-
L01.1U		Wk214	TDA9577H/N1/A/0641	TDA9577_L01UN2?.?	9352 707 60557			-	-
L01.1U		Wk217	TDA9577H/N1/A/0813	TDA9577_L01UN21.5	9352 716 14557			-	-
L01.1U		Wk239	TDA9588H/N1/3I0989	TDA9588_L01UN41.1	9352 725 48557			-	-
L01.1U		Wk249	TDA9588H/N1/3I1053	TDA9588_L01UN41.2	9352 728 40557			-	-
L01.1U		Wk315	TDA9588H/N1/3I1129	TDA9588_L01UN41.5	9352 731 49557			-	-
L01.1U		Wk238	TDA9577H/N1/AI0991	TDA9577_L01UN51.0	9352 725 49557			-	-
L01.1U		Wk248	TDA9577H/N1/AI1057	TDA9577_L01UN51.2	9352 728 41557			-	-
L01.1U		Wk315	TDA9577H/N1/AI1130	TDA9577_L01UN51.5	9352 731 51557			-	-
L01.1U		Wk310	TDA9588H/N1/3I1133	TDA9588_L01UN61.2	9352 731 54557			-	-
L01.1U		Wk121	TDA9588H/N1/3/0407	TDA9588_L01US01.7	9352 694 10557			-	-
L01.1U		Wk128	TDA9588H/N1/3/0485	TDA9588_L01US01.9	9352 699 91557			-	-

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CHASSIS	FAMILY	PRODUCTION CODE	uP TYPE/VERSION	IDENT	SERVICE CODE	HOTEL MODE ?	REMARKS TYPICAL FOR THIS SOFTWARE	REPLACED BY	
								IDENT	SERVICE CODE
L01.1U		Wk115	TDA9588H/N1/3/0384	TDA9588_L01US11.8	9352 694 09557			-	-
L01.1U		Wk128	TDA9588H/N1/3/0484	TDA9588_L01US12.0	9352 699 90557			-	-
L01.1U		Wk249	TDA9587H/N1/3I0990	TDA9577_L01US21.0	9352 725 47557			-	-
L01.1U		Wk249	TDA9588H/N1/3I0992	TDA9588_L01US21.0	9352 725 50557			-	-
L01.1U		Wk323	TDA9588H/N1/3I1132	TDA9588_L01US21.2	9352 731 53557			-	-
L01.1U		Wk330	TDA9588H/N1/3I1298	TDA9588_L01US21.3	9352 742 85557			-	-
L01.1U		Wk326	TDA9588H/N1/3I1134	TDA9588_L01US31.1	9352 731 55557			-	-
L01.1U		Wk330	TDA9588H/N1/3I1299	TDA9588_L01US31.3	9352 742 87557			-	-
L01.1U		Wk204	TDA9588H/N1/3/0636	TDA9588_L01US41.4	9352 707 12557			-	-
L01.1U		Wk217	TDA9588H/N1/3/0833	TDA9588_L01US41.7	9352 716 35557			-	-
L01.1U		Wk149	TDA9588H/N1/3/0738	TDA9588_L01US5?.?	9352 712 15557			-	-
L01.1U		Wk218	TDA9588H/N1/3/0832	TDA9588_L01US51.3	9352 716 34557			-	-
L01.2A	/71, PAL/NTSC	Wk146	TDA9580H/N1/3/0388	TDA9580_L01AC11.5	9352 693 90557			TDA9580_L01AC11.9	9352 716 23557
L01.2A	/71, PAL/NTSC	Wk217	TDA9580H/N1/3/0822	TDA9580_L01AC11.9	9352 716 23557			-	-
L01.2A		Wk336	TDA9580H/N1/3I1101	TDA9580_L01AC21.4	9352 730 12557			-	-
L01.2A	/59, /79, PAL/SECAM/NTSC ?	Wk125	TDA9580H/N1/3/0386	TDA9580_L01AN11.7	9352 693 88557			TDA9581_L01AN12.2	9352 706 99557
L01.2A	/59, /79, PAL/SECAM/NTSC ?	Wk146	TDA9580H/N1/3/0622	TDA9580_L01AN12.2	9352 706 98557			TDA9581_L01AN12.2	9352 706 99557
L01.2A	/59, /79, PAL/SECAM/NTSC ?	Wk 224	TDA9580H/N1/3/0820	TDA9580_L01AN13.1	9352 716 21557			TDA9581_L01AN12.2	9352 706 99557
L01.2A	/59, /79, PAL/SECAM/NTSC	Wk125	TDA9581H/N1/3/0392	TDA9581_L01AN11.7	9352 693 94557			TDA9581_L01AN12.2	9352 706 99557
L01.2A	/59, /79, PAL/SECAM/NTSC	Wk146	TDA9581H/N1/3/0623	TDA9581_L01AN12.2	9352 706 99557			-	-
L01.2A	/59, /79, PAL/SECAM/NTSC	Wk245	TDA9581H/N1/3/0823	TDA9581_L01AN13.1	9352 716 24557			-	-
L01.2A	/59, /79, PAL/SECAM/NTSC ?	Wk 125	TDA9586H/N1/3/0400	TDA9586_L01AN11.7	9352 694 02557			TDA9581_L01AN12.2	9352 706 99557
L01.2A	/59, /79, PAL/SECAM/NTSC ?	Wk 146	TDA9586H/N1/3/0624	TDA9586_L01AN12.2	9352 707 00557			TDA9581_L01AN12.2	9352 706 99557
L01.2A	/59, /79, PAL/SECAM/NTSC ?	Wk 224	TDA9586H/N1/3/0828	TDA9586_L01AN13.1	9352 716 30557			TDA9581_L01AN12.2	9352 706 99557
L01.2A	/67, PAL/SECAM/NTSC	Wk127	TDA9581H/N1/3/0393	TDA9581_L01AN21.0	9352 693 95557			TDA9581_L01AN22.2	9352 707 01557
L01.2A	/67, PAL/SECAM/NTSC	Wk146	TDA9581H/N1/3/0625	TDA9581_L01AN22.2	9352 707 01557			TDA9581_L01AN22.7	9352 716 25557
L01.2A	/67, PAL/SECAM/NTSC	Wk245	TDA9581H/N1/3/0824	TDA9581_L01AN22.7	9352 716 25557			-	-
L01.2A	/67, /74, PAL/SECAM/NTSC	Wk127	TDA9582H/N1/3/0396	TDA9582_L01AN21.0	9352 693 98557			TDA9582_L01AN22.2	9352 707 02557
L01.2A	/67, /74, PAL/SECAM/NTSC	Wk146	TDA9582H/N1/3/0626	TDA9582_L01AN22.2	9352 707 02557			TDA9582_L01AN22.7	9352 716 27557
L01.2A	/67, /74, PAL/SECAM/NTSC	Wk245	TDA9582H/N1/3/0826	TDA9582_L01AN22.7	9352 716 27557			-	-
L01.2A		Wk336	TDA9582H/N1/3I1093	TDA9582_L01AN41.4	9352 730 06557			-	-
L01.2A		Wk336	TDA9582H/N1/3I1097	TDA9582_L01AN51.8	9352 730 08557			-	-
L01.2A		Wk336	TDA9570H/N1/AI1102	TDA9570_L01AN71.3	9352 730 14557			-	-
L01.2A	Middle East, Pakistan, S.Africa, Zimbabwe - N	Wk146	TDA9581H/N1/3/0629	TDA9582_L01AN92.2	9352 707 05557			TDA9582_L01AN92.7	9352 716 26557
L01.2A	Middle East, Pakistan, S.Africa, Zimbabwe - N	Wk245	TDA9581H/N1/3/0825	TDA9582_L01AN92.7	9352 716 26557			-	-
L01.2A	/57, /68, /69, /79, PAL/SECAM/NTSC, 10p tex	Wk125	TDA9561H/N1/4/0373	TDA9561_L01AT11.6	9352 693 68557			TDA9561_L01AT12.4	9352 707 37557
L01.2A	/57, /68, /69, /79, PAL/SECAM/NTSC, 10p tex	Wk146	TDA9561H/N1/4/0630	TDA9561_L01AT12.4	9352 707 37557			TDA9561_L01AT12.9	9352 715 97557
L01.2A	/57, /68, /69, /79, PAL/SECAM/NTSC, 10p tex	Wk245	TDA9561H/N1/4/0801	TDA9561_L01AT12.9	9352 715 97557			-	-
L01.2A	/57, /68, /69, /79, PAL/SECAM/NTSC, 10p tex	Wk125	TDA9567H/N1/4/0382	TDA9567_L01AT11.6	9352 693 81557			TDA9567_L01AT12.4	9352 707 08557
L01.2A	/57, /68, /69, /79, PAL/SECAM/NTSC, 10p tex	Wk146	TDA9567H/N1/4/0632	TDA9567_L01AT12.4	9352 707 08557			TDA9567_L01AT12.9	9352 716 05557
L01.2A	/57, /68, /69, /79, PAL/SECAM/NTSC, 10p tex	Wk245	TDA9567H/N1/4/0809	TDA9567_L01AT12.9	9352 716 05557			-	-
L01.2A	/59, /65, PAL/SECAM/NTSC, 10p	Wk127	TDA9561H/N1/4/0374	TDA9561_L01AT21.2	9352 693 69557			TDA9561_L01AT22.4	9352 707 09557
L01.2A	/59, /65, PAL/SECAM/NTSC, 10p	Wk146	TDA9561H/N1/4/0633	TDA9561_L01AT22.4	9352 707 09557			TDA9561_L01AT22.8	9352 715 98557
L01.2A	/59, /65, PAL/SECAM/NTSC, 10p	Wk245	TDA9561H/N1/4/0802	TDA9561_L01AT22.8	9352 715 98557			-	-
L01.2A	/59, /65, PAL/SECAM/NTSC, 10p	Wk127	TDA9567H/N1/4/0383	TDA9567_L01AT21.2	9352 693 82557			TDA9567_L01AT22.4	9352 707 11557
L01.2A	/59, /65, PAL/SECAM/NTSC, 10p	Wk146	TDA9567H/N1/4/0635	TDA9567_L01AT22.4	9352 707 11557			TDA9567_L01AT22.8	9352 716 04557
L01.2A	/59, /65, PAL/SECAM/NTSC, 10p	Wk245	TDA9567H/N1/4/0808	TDA9567_L01AT22.8	9352 716 04557			-	-
L01.2L		Wk210	TDA9570H/N1/A/????	TDA9570_L01LM11.2	9352 707 65557			-	-
L01.2L			TDA9570H/N1/A/0815	TDA9570_L01LM1?.?	9352 716 11557			-	-
L01.2L		Wk248	TDA9570H/N1/AI1010	TDA9570_L01LN21.0	9352 725 51557			-	-
L01.2L		Wk314	TDA9570H/N1/AI1181	TDA9570_L01LN21.1	9352 734 91557			-	-
L01.2L		Wk210	TDA9570H/N1/A/0737	TDA9570_L01LS21.2	9352 712 14557			-	-
L01.2L			TDA9570H/N1/A/0816	TDA9570_L01LS2?.?	9352 716 12557			-	-
L01.2U		Wk331	TDA9568/N1/4I1314	TDA9568_L01UD11.4	9352 743 95557			-	-
L01.2U		Wk110	TDA9587H/N1/3/0371	TDA9587_L01UM11.1	9352 693 54557			-	-
L01.2U		Wk115	TDA9587H/N1/3/0417	TDA9587_L01UM11.3	9352 695 44557			-	-

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CHASSIS	FAMILY	PRODUCTION CODE	uP TYPE/VERSION	IDENT	SERVICE CODE	HOTEL MODE ?	REMARKS TYPICAL FOR THIS SOFTWARE	REPLACED BY	
								IDENT	SERVICE CODE
L01.2U		Wk128	TDA9587H/N1/3/0482	TDA9587_L01UM11.5	9352 699 88557			-	-
L01.2U		Wk211	TDA9577H/N1/A/0642	TDA9577_L01UM21.2	9352 707 61557			-	-
L01.2U		Wk218	TDA9577H/N1/A/0818	TDA9577_L01UM21.5	9352 716 19557			-	-
L01.2U		Wk120	TDA9587H/N1/3/0440	TDA9587_L01UN11.7	9352 697 54557			-	-
L01.2U		Wk128	TDA9587H/N1/3/0483	TDA9587_L01UN11.9	9352 699 89557			-	-
L01.2U		Wk211	TDA9577H/N1/A/0642	TDA9577_L01UN31.2	9352 707 61557			-	-
L01.2U		Wk218	TDA9577H/N1/A/0818	TDA9577_L01UN31.5	9352 716 19557			-	-
L01.2U		Wk310	TDA9587H/N1/3I1136	TDA9587_L01UN61.2	9352 731 64557			-	-
L01.2U		Wk115	TDA9587H/N1/3/0403	TDA9587_L01US11.8	9352 694 05557			-	-
L01.2U		Wk128	TDA9587H/N1/3/0481	TDA9587_L01US12.0	9352 699 87557			-	-
L01.2U		Wk204	TDA9587H/N1/3/0637	TDA9577_L01US41.4	9352 707 13557			-	-
L01.2U		Wk217	TDA9587H/N1/3/0830	TDA9577_L01US41.7	9352 716 32557			-	-
L01.2U		Wk324	TDA9587H/N1/3I1135	TDA9588_L01US61.1	9352 731 63557			-	-
L01.xA		Wk336	TDA9583H/N1/3I1100	TDA9552_L01AC21.4	9352 730 11557			-	-
L01H.1A	ITV, /67, /68, /69, /79, /93, /94, PAL/SECAM/N	Wk145	TDA9555H/N1/3	TDA9555_L01HA11.4	9965 000 14523			-	-
L01H.2A	/59, /69, /79, /93, /94, PAL/SECAM/NTSC, 1p	Wk145	TDA9552H/N1/3	TDA9552_L01HA11.4	9965 000 14513			-	-
L01.1E	West Europe - 10 Page Text	Wk120.2 or higher	TDA9565H/N1/5/0381	TDA9565_L01EF11.7	9352 693 80557			TDA9565_L01EF11.9	9352 698 96557
L01.1E	West Europe - 10 Page Text	Wk124.4 or higher	TDA9565H/N1/5/0466	TDA9565_L01EF11.9	9352 698 96557			-	-
L01.1E	West Europe - 10 Page Text	Wk140.3 or higher	TDA9565H/N1/5/0579	TDA9565_L01EF12.2	9352 704 32557			TDA9565_L01EF13.6	9352 716 01557
L01.1E	West Europe - 10 Page Text	Wk 221.1 or higher	TDA9565H/N1/5/0648	TDA9565_L01EF13.1	9352 707 67557		Main solved issues : NVM deprogrammation, Erratic character in AV source,	TDA9565_L01EF13.6	9352 716 01557
L01.1E	West Europe - 10 Page Text	Wk221.4 or higher	TDA9565H/N1/5/0805	TDA9565_L01EF13.6	9352 716 01557			-	-
L01.1E	West Europe - 10 Page Text	Wk323 or higher	TDA9565H/N1/5I/1121	TDA9565_L01EF14.1	9352 731 17557		Used for UOC ES4 and linked to hardware modifications (CP62223)	TDA9565_L01EF14.2	9352 740 99557
L01.1E	West Europe - 10 Page Text	Wk329 or higher	TDA9565H/N1/5I/1260	TDA9565_L01EF14.2	9352 740 99557		Solved: FM radio tuning problem	-	-
L01.1E	West Europe - 10 Page Text	Wk339 or higher	TDA9565H/N1/5I/1378	TDA9565_L01EF14.3	9352 750 73557		Solved: Sound issue with BPB bit setting	-	-
L01.1E	East Europe - 10 Page Text	Wk120.2 or higher	TDA9563H/N1/5/0377	TDA9563_L01EF21.5	9352 693 76557			TDA9563_L01EF21.7	9352 698 98557
L01.1E	East Europe - 10 Page Text	Wk124.4 or higher	TDA9563H/N1/5/0468	TDA9563_L01EF21.7	9352 698 98557			-	-
L01.1E	East Europe - 10 Page Text	Wk140.3 or higher	TDA9563H/N1/5/0582	TDA9563_L01EF22.2	9352 704 35557			TDA9565_L01EF23.6	9352 716 02557
L01.1E	East Europe - 10 Page Text	Wk210 or higher	TDA9565H/N1/5/0739	TDA9565_L01EF23.1	9352 712 22557		Main solved issues : NVM deprogrammation, Erratic character in AV source,	TDA9565_L01EF23.6	9352 716 02557
L01.1E	East Europe - 10 Page Text	Wk236 or higher	TDA9565H/N1/5/0806	TDA9565_L01EF23.6	9352 716 02557			-	-
L01.1E	East Europe - 10 Page Text	Wk323 or higher	TDA9565H/N1/5I/1118	TDA9565_L01EF24.1	9352 731 15557		Used for UOC ES4 and linked to hardware modifications (CP62223)	TDA9565_L01EF24.2	9352 741 02557
L01.1E	East Europe - 10 Page Text	Wk329 or higher	TDA9565H/N1/5I/1262	TDA9565_L01EF24.2	9352 741 02557		Solved: FM radio tuning problem	-	-
L01.1E	East Europe - 10 Page Text	Wk339 or higher	TDA9565H/N1/5I/1380	TDA9565_L01EF24.3	9352 750 75557		Solved: Sound issue with BPB bit setting	-	-
L01.1E	West Europe - 1 Page Text	Wk150 or higher	TDA9555H/N1/3/0667	TDA9555_L01ET01.1	9352 708 92557		Initial version	TDA9555_L01ET51.5	9352 712 25557
L01.1E	East/West Europe - 1 Page Text	Wk210 or higher	TDA9555H/N1/3/0742	TDA9555_L01ET51.5	9352 712 25557		This version replace both the L01ET01.1 and L01ET91.1 Main solved issues : NVM deprogrammation, Erratic character in AV source	-	-
L01.1E	East/West Europe - 1 Page Text	Wk220 or higher	TDA9555H/N1/3/0800	TDA9555_L01ET51.7	9352 715 96557		This version replace both the L01ET01.1 and L01ET91.1 Main solved issues : Flyback after cold/warm start, removing of the non-QSS chassis drining. To drive -/58 chassis, version L01ET51.5 must be used.	TDA9555_L01ET51.8	9352 725 45557
L01.1E	East/West Europe - 1 Page Text	Wk220 or higher	TDA9555H/N1/3/1016	TDA9555_L01ET51.8	9352 725 45557		Solved issue: TV does not reset after channel change	-	-
L01.1E	East/West Europe - 1 Page Text	Wk323 or higher	TDA9555H/N1/3I/1124	TDA9555_L01ET51.9	9352 731 21557		Used for UOC ES4 and linked to hardware modifications (CP62223). Solved:	TDA9555_L01ET52.0	9352 731 21557
L01.1E	East/West Europe - 1 Page Text	Wk329 or higher	TDA9555H/N1/3I/1290	TDA9555_L01ET52.0	9352 742 22557		Solved: smart sound and cinch CL output without signal	TDA9555_L01ET52.1	9352 754 52557
L01.1E	East/West Europe - 1 Page Text	Wk341 or higher	TDA9555H/N1/3 I/1413	TDA9555_L01ET52.1	9352 754 52557		Solved: Set BPB bit according QSS setting		
L01.1E	West Europe	Wk219 or higher	TDA9565H/N1/5/0650	TDA9565_L01ED11.6	9352 707 69557		Initial version	TDA9565_L01ED11.8	9965 000 23230
L01.1E	West Europe	Wk226 or higher	TDA9565H/N1/5/1082	TDA9565_L01ED11.7	9352 729 33557		Solved: Format not remembered if DVD mode is left, EHT delay, reloading of default values in SDAM, NVM corruption when auto store is interrupted after detecting more than 46 channels	TDA9565_L01ED11.8	9965 000 23230
L01.1E	West Europe	Wk343 or higher	TDA9565H/N1	TDA9565_L01ED11.8	9965 000 23230		Solves : TV goes in standby after pressing "TV guide" button	-	-
L01.1E	SD3.1 aplication software	Wk246	AM29LV60DT-90SC	Version 4.17.11-1	9965 000 16406				
L01.1E	SD3.1 servo software	Wk246	AM29F002T	Version 5.1.14	3104 123 85860				
L01.1E	East Europe	Wk226 or higher	TDA9565H/N1/5/0922	TDA9565_L01ED21.6	9352 721 74557		Initial version	TDA9565_L01ED21.7	9352 729 32557
L01.1E	East Europe	Wk248 or higher	TDA9565H/N1/5/1081	TDA9565_L01ED21.7	9352 729 32557			-	-
L01.1E	East Europe	Wk342	TDA9565H/N1/5/	TDA9565_L01ED21.8	9352 729 32557			-	-
L01.1E	SD3.1 aplication software	Wk246	AM29LV60DT-90SC	Version 4.17.11-1	9965 000 16406				
L01.1E	SD3.1 servo software	Wk246	AM29F002T	Version 5.1.14	3104 123 85860				
L01.2E	West Europe - 10 Page Text	Wk120.2 or higher	TDA9561H/N1/5/0375	TDA9561_L01EF11.7	9352 693 74557			TDA9561_L01EF11.9	9352 698 97557
L01.2E	West Europe - 10 Page Text	Wk124.4 or higher	TDA9561H/N1/5/0467	TDA9561_L01EF11.9	9352 698 97557			-	-
L01.2E	West Europe - 10 Page Text	Wk140.3 or higher	TDA9561H/N1/5/0578	TDA9561_L01EF12.2	9352 704 31557			-	-
L01.2E	West Europe - 10 Page Text	Wk 211.1 or higher	TDA9567H/N1/5/0651	TDA9567_L01EF13.1	9352 707 70557		Main solved issues : NVM deprogrammation, Erratic character in AV source, German translation correction Smart sound TV added	TDA9567_L01EF13.6	9352 716 07557
L01.2E	West Europe - 10 Page Text	Wk221.4 or higher	TDA9567H/N1/5/0811	TDA9567_L01EF13.6	9352 716 07557		Solved: flyback after cold/warm start, RGB TXT output adjustable, improvement of TXT page acquisition, spatial function works if NVM locatio 13A = +80h	-	-
L01.2E	West Europe - 10 Page Text	Wk325 or higher	TDA9567H/N1/5I/1119	TDA9567_L01EF14.1	9352 731 16557		Used for UOC ES4 and linked to hardware modifications (CP62223). Solved:	TDA9567_L01EF14.2	9352 741 01557
L01.2E	West Europe - 10 Page Text	Wk329 or higher	TDA9567H/N1/5I1261	TDA9567_L01EF14.2	9352 741 01557		Solved: FM radio tuning problems	TDA9567_L01EF14.3	9352 750 74557
L01.2E	West Europe - 10 Page Text	Wk339 or higher	TDA9567H/N1/5I/1379	TDA9567_L01EF14.3	9352 750 74557		Solved: sound issue with BPB bit setting	-	-

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CHASSIS	FAMILY	PRODUCTION CODE	uP TYPE/VERSION	IDENT	SERVICE CODE	HOTEL MODE ?	REMARKS TYPICAL FOR THIS SOFTWARE	REPLACED BY	
								IDENT	SERVICE CODE
L01.2E	West Europe - 10 Page Text	Wk120.2 or higher	TDA9567H/N1/5/0385	TDA9567_L01EF11.7	9352 693 87557			TDA9567_L01EF11.9	9352 698 95557
L01.2E	West Europe - 10 Page Text	Wk124.4 or higher	TDA9567H/N1/5/0465	TDA9567_L01EF11.9	9352 698 95557			-	-
L01.2E	West Europe - 10 Page Text	Wk140.3 or higher	TDA9567H/N1/5/0580	TDA9567_L01EF12.2	9352 704 33557			-	-
L01.2E	West Europe - 10 Page Text	Wk 211.1 or higher	TDA9567H/N1/5/0651	TDA9567_L01EF13.1	9352 707 70557		Main solved issues : NVM deprogrammation, Erratic character in AV source, German translation correction Smart sound TV added	TDA9567_L01EF13.6	9352 716 07557
L01.2E	West Europe - 10 Page Text	Wk221.4 or higher	TDA9567H/N1/5/0811	TDA9567_L01EF13.6	9352 716 07557		Solved: flyback after cold/warm start, RGB TXT output adjustable, improvement of TXT page acquisition, spatial function works if NVM locatio 13A = +80h	-	-
L01.2E	West Europe - 10 Page Text	Wk325 or higher	TDA9567H/N1/5I/1119	TDA9567_L01EF14.1	9352 731 16557		Used for UOC ES4 and linked to hardware modifications (CP62223). Solved:	TDA9567_L01EF14.2	9352 741 01557
L01.2E	West Europe - 10 Page Text	Wk329 or higher	TDA9567H/N1/5I1261	TDA9567_L01EF14.2	9352 741 01557		Solved: FM radio tuning problems	TDA9567_L01EF14.3	9352 750 74557
L01.2E	West Europe - 10 Page Text	Wk339 or higher	TDA9567H/N1/5I/1379	TDA9567_L01EF14.3	9352 750 74557		Solved: sound issue with BPB bit setting	-	-
L01.2E	East Europe - 10 Page Text	Wk120.2 or higher	TDA9561H/N1/0376	TDA9561_L01EF21.5	9352 693 75557			TDA9561_L01EF21.7	9352 698 99557
L01.2E	East Europe - 10 Page Text	Wk124.4 or higher	TDA9561H/N1/0469	TDA9561_L01EF21.7	9352 698 99557			TDA9561_L01EF22.2	9352 704 34557
L01.2E	East Europe - 10 Page Text	Wk140.3 or higher	TDA9561H/N1/0581	TDA9561_L01EF22.2	9352 704 34557			-	-
L01.2E	East Europe - 10 Page Text	Wk 211.1 or higher	TDA9567H/N1/0740	TDA9567_L01EF23.1	9352 712 23557		Main solved issues : NVM deprogrammation, Erratic character in AV source, German translation correction Smart sound TV added	TDA9567_L01EF23.6	9352 716 08557
L01.2E	East Europe - 10 Page Text	Wk 221.1 or higher	TDA9567H/N1/0812	TDA9567_L01EF23.6	9352 716 08557		Solved: flyback after cold/warm start, RGB TXT output adjustable, improvement of TXT page acquisition, spatial function works if NVM locatio 13A = +80h	-	-
L01.2E	East Europe - 10 Page Text	Wk 325 or higher	TDA9567H/N1/5I/1122	TDA9567_L01EF24.1	9352 731 18557		Used for UOC ES4 and linked to hardware modifications (CP62223). Solved: channel zapping problem due to the program ID issue	TDA9567_L01EF24.2	9352 741 03557
L01.2E	East Europe - 10 Page Text	Wk329 or higher	TDA9567H/N1/5I1263	TDA9567_L01EF24.2	9352 741 03557			TDA9567_L01EF24.3	9352 750 76557
L01.2E	East Europe - 10 Page Text	Wk339 or higher	TDA9567H/N1/5I/1381	TDA9567_L01EF24.3	9352 750 76557			-	-
L01.2E	West Europe - 1 Page Text		TDA9552H/N1/3/0668	TDA9552_L01ET01.1	9352 708 93557			TDA9552_L01ET51.5	9352 712 24557
L01.2E	East/West Europe - 1 Page Text		TDA9552H/N1/3/0741	TDA9552_L01ET51.5	9352 712 24557		This version replace both the L01ET01.1 and L01ET91.1 Main solved issues : NVM deprogrammation, Erratic character in AV source	TDA9552_L01ET51.7	9352 715 95557
L01.2E	East/West Europe - 1 Page Text		TDA9552H/N1/3/0799	TDA9552_L01ET51.7	9352 715 95557		This version replace both the L01ET01.1 and L01ET91.1 Main solved issues : Flyback after cold/warm start, removing of the non-QSS chassis drining. To drive -/58 chassis, version L01ET51.5 must be used.	TDA9552_L01ET51.8	9352 725 44557
L01.2E	East/West Europe - 1 Page Text		TDA9552H/N1/3/1015	TDA9552_L01ET51.8	9352 725 44557		Solved issue: TV does not reset after channel change	TDA9552_L01ET51.9	9352 731 19557
L01.2E	East/West Europe - 1 Page Text	Wk325 or higher	TDA9552H/N1/3I/1123	TDA9552_L01ET51.9	9352 731 19557		Used for UOC ES4 and linked to hardware modifications (CP62223). Solved: channel zapping problem due to the program ID issue	TDA9552_L01ET52.0	9352 742 21557
L01.2E	East/West Europe - 1 Page Text	Wk329 or higher	TDA9552H/N1/3I/1289	TDA9552_L01ET52.0	9352 742 21557		Solved: smart sound and cinch CL output without signal	TDA9552_L01ET52.1	9352 754 53557
L01.2E	East/West Europe - 1 Page Text	Wk341 or higher	TDA9552H/N1/3I/1414	TDA9552_L01ET52.1	9352 754 53557		Solved: Set BPB bit according QSS setting	-	-
L01.1E	West Europe	Wk318	TDA9565H/N1/5I/????	TDA9565_L3DEF1-1.0	?				
L01.1E	West Europe	Wk320	TDA9565H/N1/5I/????	TDA9565_L3DEF1-1.1	?				
L01.1E	West Europe	Wk329	TDA9565H/N1/5I/????	TDA9565_L3DEF1-1.2	9965 000 26547		Solved: virtual Dolby in radio mode, add return key for DVD		
L01.1E	East Europe	Wk318	TDA9565H/N1/5I/????	TDA9565_L3DEF2-1.0	?				
L01.1E	East Europe	Wk320	TDA9565H/N1/5I/????	TDA9565_L3DEF2-1.1	?				
L01.1E	East Europe	Wk329	TDA9565H/N1/5I/????	TDA9565_L3DEF2-1.2	?		Solved: virtual Dolby in radio mode, add return key for DVD		
L01.1E	East Europe (21PT6818/58)	?	TDA9565H/N1/5I/1439	TDA9565_L3DEF2-128	9965 000 26548				
L01H.1A			TDA9555H/N1/3	L01HA1 1.4	9965 000 14523		OTP		
L01H.2A			TDA9552H/N1/3	L01HA1 1.4	9965 000 14513		OTP		
L01H.2A			TDA9552H/N1/3	L01HA1 1.9	9965 000 14513		OTP		
L01H.1E	EU		TDA9555H/N1/3/0608	L01HE1 VER 1.0	9352 706 23557			L01HE1 VER 1.1	9352 722 11557
L01H.1E		WK234.1 or higher	TDA9555H/N1/3/0930	L01HE1 VER 1.1	9352 722 11557		No flyback line at start-up		
L01H.1E		WK325 or higher	TDA9555H/N1/3I/1245	L01HE1 VER 1.2	9352 740 43557		Used for UOC ES4 and linked to hardware modifications (CP62297).		
L01H.2E	EU		TDA9552H/N1/3/0607	L01HE1 VER 1.0	9352 706 22557			L01HE1 VER 1.1	9352 722 10557
L01H.2E		WK234.1 or higher	TDA9552H/N1/3/0929	L01HE1 VER 1.1	9352 722 10557		No flyback line at start-up		
L01H.2E		WK305 or higher	TDA9552H/N1/3I/1244	L01HE1 VER 1.2	9352 740 42557		Used for UOC ES4 and linked to hardware modifications (CP62297).		
L01H.2E		WK305 or higher	TDA9552H/N1/3I/1275	L01HE1 VER 1.3	9352 741 74557		Solved: Mono radio search with UOC ES4.3		
L03U	L03SP		TDA9377PS/N2/AI1450	L03UN11.1					
L03U	L03SP	Wk343	TDA9377PS/N2/AI1372	TDA9377_L03US11.0	9352 749 89112				
L03U	L03SP	Wk350	TDA9377PS/N2/AI1424	TDA9377_L03US21.1	9352 755 47112				
L03L	L03SP	Wk315	TDA9377PS/N2/AI1204	TDA9377_L03LM11.2	9352 737 37112			TDA9377_L03LM11.3	9352 750 97112
L03L	L03SP	Wk346	TDA9377PS/N2/AI1385	TDA9377_L03LM11.3	9352 750 97112			-	
L03L	L03SP	Wk315	TDA9370PS/N2/AI1205	TDA9370_L03LM11.2	9352 737 38112			TDA9370_L03LM11.3	9352 750 94112
L03L	L03SP	Wk346	TDA9370PS/N2/AI1382	TDA9370_L03LM11.3	9352 750 94112			-	-
L03L	L03SP	Wk315	TDA9377PS/N2/AI1207	TDA9377_L03LS11.3	9352 737 41112			TDA9377_L03LS11.7	9352 750 96112
L03L	L03SP	Wk327	TDA9377PS/N2/AI1279	TDA9377_L03LS11.6	9352 741 93112			TDA9377_L03LS11.7	9352 750 96112
L03L	L03SP	Wk346	TDA9377PS/N2/AI1384	TDA9377_L03LS11.7	9352 750 96112			-	-
L03L	L03SP	Wk315	TDA9370PS/N2/AI1206	TDA9370_L03LS11.3	9352 737 39112			TDA9370_L03LS11.7	9352 750 95112
L03L	L03SP	Wk327	TDA9370PS/N2/AI1280	TDA9370_L03LS11.6	9352 741 94112			TDA9370_L03LS11.7	9352 750 95112
L03L	L03SP	Wk346	TDA9370PS/N2/AI1383	TDA9370_L03LS11.7	9352 750 95112			-	-
L04E	West Europe, Radio	Wk433 or higher	TDA12020H1/N1B11 TDA12021H1/N1B11	L4LEF1_1.6	3139 127 01142			L4LEF1_1.7	3139 127 01142

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CHASSIS	FAMILY	PRODUCTION CODE	uP TYPE/VERSION	IDENT	SERVICE CODE	HOTEL MODE ?	REMARKS TYPICAL FOR THIS SOFTWARE	REPLACED BY IDENT	REPLACED BY SERVICE CODE
L04E	West Europe, Radio	Wk441 or higher	TDA12020H1/N1B11 TDA12021H1/N1B11	L4LEF1_1.7	3139 127 01143		Solved: FM channel cannot be stored when performing manual store in Radio Mode, Background Brightness in Radio mode	-	-
L04E	East Europe, Radio	Wk433 or higher	TDA12020H1/N1B11 TDA12021H1/N1B11	L4LEF2_1.6	3139 127 01152			L4LEF2_1.6	3139 127 01153
L04E	East Europe, Radio	Wk441 or higher	TDA12020H1/N1B11 TDA12021H1/N1B11	L4LEF2_1.7	3139 127 01153		Solved:FM channel cannot be stored when performing manual store in Radio Mode,Background Brightness in Radio mode	-	-
L04E	West Europe, PIP	Wk426 or higher	TDA12020H1/N1B11 TDA12021H1/N1B11	L04EF3_1.7	3139 127 01161			L04EF3_1.8	3139 127 01162
L04E	West Europe, PIP	Wk441 or higher	TDA12020H1/N1B11 TDA12021H1/N1B11	L04EF3_1.8	3139 127 01162		Solved:CR 223: solution to not cover the edge in 4:3 zoom format	-	-
L04E	East Europe, PIP	Wk426 or higher	TDA12020H1/N1B11 TDA12021H1/N1B11	L04EF4_1.7	3139 127 01171			L04EF4_1.8	3139 127 01172
L04E	East Europe, PIP	Wk441 or higher	TDA12020H1/N1B11 TDA12021H1/N1B11	L04EF4_1.8	3139 127 01172		Solved:CR 223: solution to not cover the edge in 4:3 zoom format	-	-
L04E	West Europe (>21"), PIP	Wk414 or higher	TDA12020H1/N1B11 TDA12021H1/N1B11	L4LEF5_1.0	3139 127 01541				
L04E	East Europe (>21"),PIP	Wk414 or higher	TDA12020H1/N1B11 TDA12021H1/N1B11	L4LEF6_1.0	3139 127 01551				
L04E	East/West Europe	Wk426 or higher	TDA12020H1/N1B11 TDA12021H1/N1B11	L4LEF7_1.5	3139 127 01181		Solved:Continuous Zoom of screen format 4:3 is remembered;NR doesn't work when toggle LTI feature	L4LEF7_1.7	9965 000 26211
L04E	East/West Europe	Wk433 or higher	TDA12020H1/N1B11 TDA12021H1/N1B11	L04EF7_1.7	3139 127 01182		Solved:Nicam mute (need new library);Nicam stereo detection incorrect;TXT favorit page n+1 not memorized;character "0" displayed in the screen	L4LEF7_1.8	3139 127 01183
L04E	East/West Europe	Wk441 or higher	TDA12020H1/N1B11 TDA12021H1/N1B11	L04EF7_1.8	3139 127 01183		Solved:Continuous Zoom of screen format 4:3 is remembered,NR doesn't work when toggle LTI feature,CR161: ICON UI software missing LTI function		
L04E			TDA12021H1/N1B11	L4TEF1_1.0					
L04E			TDA12021H1/N1B11	L4IEF1x.x	3139 127 02861			L4IEF1_1.5	3139 127 02862
L04E			TDA12021H1/N1B11	L4IEF1_1.5	3139 127 02862				
L04E	IBO			NOR2.1	3139 127 02692				
L04A	China/Thai AP	Wk409 or higher	TDA12060H1/N1B001AE TDA12010H1/N1B101AF TDA12011H1/N1B101AG	L04AN1_1.0	3139 127 01101			L4LAN1_1.9	3139 127 01231
L04A	China/Thai AP	Wk4xx or higher	TDA12060H1/N1B001AE TDA12010H1/N1B101AF TDA12011H1/N1B101AG	L4LAN1_1.9	3139 127 01231		Solved:No sound after press SAP key twice;Monitor out no sound;PAL I detection wrong;improve sound detection over modulation and auto detection level.		
L04A	India AP	Wk4xx or higher	TDA12060H1/N1B001AH TDA12011H1/N1B511AU	L04AN2_1.0	3139 127 01111			L04AN2_1.1	3139 127 01241
L04A	India AP	Wk431 or higher	TDA12060H1/N1B001AH TDA12011H1/N1B511AU	L04AN2_1.1	3139 127 01241		Solved:monitor out no sound;only support 100 channel sound standard and color standard while there is 200 channels;AV-Stereo Auto-Sound Detection;Modify sound detection behavior and algorithm to solve sound detection and cracking;OSD Name change from Digi Pic Demo to D.C.V. Demo		
L04A	S'pore Aus NZ AP	Wk4xx or higher	TDA12020H1/N1B101AI TDA12021H1/N1B101AJ	L04AF1_1.0	3139 127 01081			L04AF1_1.6	3139 127 01211
L04A	S'pore Aus NZ AP	Wk415 or higher	TDA12020H1/N1B101AI TDA12021H1/N1B101AJ	L04AF1_1.6	3139 127 01211		Solved:TV Sets switch off with incorrect stop timesuz;Active control value are wrong during pressing smart key;auto program will be interrupt by pressing 123654 key;some keys (Incredible Surround ,AV) doesn't work in the teletext;PAL-I no NICAM after working several minutes;the sound level is abnormal after do cold start;Picture will be more wide when switch TV to mixed teletext mode;get wrong sound mode when select sound mode in factory;EWW offset in Full Text Mode for 16:9 sets		
L04A	Middle East AP	Wk4xx or higher	TDA12020H1/N1B101AK TDA12021H1/N1B101AL	L04AF2_1.0	3139 127 01091			L4LAF2_1.5	3139 127 01221
L04A	Middle East AP	Wk415 or higher	TDA12020H1/N1B101AK TDA12021H1/N1B101AL	L04AF2_1.5	3139 127 01221		Solved:Sets switch off with incorrect stop time;on the top of subtitle was invisible(time and data)in teletext mode;Active control value are wrong during pressing smart key;auto program will be interrupt by pressing 123654 key;some keys (Incredible Surround ,AV) doesn't work in the teletext.;PAL-I no NICAM after working several minutes;the sound level is abnormal after do cold start;Picture will be more wide when switch TV to mixed teletext mode;get wrong sound mode when select sound mode in factory		
L04A	Taiwan/Philipine AP	Wk4xx or higher	TDA12010H1/N1B501AM TDA12011H1/N1B511AN	L04AC1_1.0	3139 127 01071			L4LAC1_1.4	3139 127 01201
L04A	Taiwan/Philipine AP	Wk4xx or higher	TDA12010H1/N1B501AM TDA12011H1/N1B511AN	L04AC1_1.4	3139 127 01201		Solved:To add factory mode command (2, y) + (23, 34);Adjustable Max Bass Level		

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CHASSIS	FAMILY	PRODUCTION CODE	uP TYPE/VERSION	IDENT	SERVICE CODE	HOTEL MODE ?	REMARKS TYPICAL FOR THIS SOFTWARE	REPLACED BY	
								IDENT	SERVICE CODE
L04U	Nafta	Wk4xx or higher	TDA12000H1/N1B501AB TDA12001H1/N1B511AC TDA12001H1/N1B501AD	L04US1_2.0	3139 127 00991			L4LUS1_2.1	3139 127 01121
L04U	Nafta	Wk4xx or higher	TDA12000H1/N1B501AB TDA12001H1/N1B511AC TDA12001H1/N1B501AD	L04US1_2.1	3139 127 01121			L4LUS1_2.5	3139 127 01122
L04U			TDA12000H1/N1B501AQ	L4LUS1_2.5	3139 127 01122		Solved:LTI is not turned off in Factory mode	L4LUS1_2.6	3139 127 01123
L04U			TDA12000H1/N1B501AQ	L4LUS1_2.6	3139 127 01123		Solution for sound initialization		
L04L	Latam	Wk4xx or higher	TDA12040H1/N1B501AO TDA12040H1/N1B511AP	L04LS1_1.0	3139 127 01001			L4LLS1_1.3	3139 127 01131
L04L			TDA12040H1/N1B501AO TDA12040H1/N1B511AP	L4LLS1_1.3	3139 127 01131		Solved:dot will be seen during auto program ;Auto Program does not work(IQMS:7489);No signal channel is not skipped by auto program;vertical line	L4LLS1_1.6	3139 127 01132
L04L			TDA12040H1/N1B501AO TDA12040H1/N1B511AP	L4LLS1_1.6	3139 127 01132		Solved:"SAP" OSD display not correctly;WIDESCREEN FORMAT individually alignment and Offset address to 50Hz and 60Hz;To Align the Horizontal Shift	L4LLS1_1.7	3139 127 01133
L04L			TDA12040H1/N1B501AO TDA12040H1/N1B511AP	L4LLS1_1.7	3139 127 01133		Solved:Reduce stereo detection sensitivity for a special channel in Latam;Lost sound in local transmission. (IQMS8346);To Align the Horizontal Shift (HSH) for		
LC03E	West Europe	Wk313 or higher	SAA5667 HL/M1	LC03E21-2.00	9965 000 18102		Use scaler software S3xx 2.00	LC03E21-2.07	9965 000 21051
LC03E	West Europe	Wk320 or higher	SAA5667 HL/M1	LC03E21-2.03	3111 250 54881		Use scaler software S3xx 2.04	LC03E21-2.07	9965 000 21051
LC03E	West Europe	Wk324 or higher	SAA5667 HL/M1	LC03E21-2.04	9965 000 26574		Use scaler software S3xx 2.06	LC03E21-2.07	9965 000 21051
LC03E	West Europe	Wk324 or higher	SAA5667 HL/M1	LC03E21-2.05	9965 000 23136		Use scaler software S3xx 2.07	LC03E21-2.07	9965 000 21051
LC03E	West Europe	Wk324 or higher	SAA5667 HL/M1	LC03E21-2.06	9965 000 26575		Use scaler software S3xx 2.08	LC03E21-2.07	9965 000 21051
LC03E	West Europe	Wk328 or higher	SAA5667 HL/M1	LC03E21-2.07	9965 000 21051		For 15"/17" TN use scaler software S3xx 2.08 For 15"/17" IPS use scaler software S3xx 2.20 For 23" IPS use scaler software S3xx 2.09	LC03E21-2.07	9965 000 21051
LC03E	West Europe	Wk3?? or higher	SAA5667 HL/M1	LC03E21-2.09	9965 000 23453		For 15"/17" TN use scaler software S3xx 2.08 For 15"/17" IPS use scaler software S3xx 2.20 For 23" IPS use scaler software S3xx 2.09	-	-
LC03E	East Europe	Wk313 or higher	SAA5667 HL/M1	LC03E22-2.00	9965 000 18103		Use scaler software S3xx 2.00	LC03E21-2.07	9965 000 21051
LC03E	East Europe	Wk320 or higher	SAA5667 HL/M1	LC03E22-2.03	3111 250 54891		Use scaler software S3xx 2.04	LC03E21-2.07	9965 000 21051
LC03E	East Europe	Wk324 or higher	SAA5667 HL/M1	LC03E22-2.04	9965 000 26576		Use scaler software S3xx 2.06	LC03E21-2.07	9965 000 21051
LC03E	East Europe	Wk324 or higher	SAA5667 HL/M1	LC03E22-2.05	9965 000 23135		Use scaler software S3xx 2.07	LC03E21-2.07	9965 000 21051
LC03E	East Europe	Wk324 or higher	SAA5667 HL/M1	LC03E22-2.06	9965 000 26601		Use scaler software S3xx 2.08	LC03E21-2.07	9965 000 21051
LC03E	East Europe	Wk328 or higher	SAA5667 HL/M1	LC03E22-2.07	9965 000 21052		For 15"/17" TN use scaler software S3xx 2.08 For 15"/17" IPS use scaler software S3xx 2.21 For 23" IPS use scaler software S3xx 2.09	LC03E21-2.07	9965 000 21051
LC03E	East Europe	Wk3?? or higher	SAA5667 HL/M1	LC03E22-2.09	3111 250 54981		For 15"/17" TN use scaler software S3xx 2.08 For 15"/17" IPS use scaler software S3xx 2.21 For 23" IPS use scaler software S3xx 2.09	-	-
LC03A	AP, PAL -/69 15" & 17"	Wk??? or higher	SAA5667 HL/M1	LC03A21-2.00	9965 000 19412		Use scaler software S3xx 2.00	-	-
LC03A	AP, PAL -/69 15" & 17"	Wk??? or higher	SAA5667 HL/M1	LC03A21-2.03	9965 000 21078		Use scaler software S3xx 2.08	-	-
LC03A	AP, PAL -/69 15" & 17"	Wk??? or higher	SAA5667 HL/M1	LC03A21-2.04	9965 000 23132			-	-
LC03A	AP, PAL -/61 15" & 17"	Wk??? or higher	SAA5645 HL/M1	LC03A32-2.03	9965 000 21079		Use scaler software S3xx 2.08	-	-
LC03A	AP, PAL -/61 15" & 17"	Wk??? or higher	SAA5645 HL/M1	LC03A32-2.04	9965 000 23131			-	-
LC03U	NAFTA, 15" & 17"	Wk??? or higher	SAA5647 HL/M1	LC03U11-2.01	9965 000 19420		Use scaler software S3xx 2.00	-	-
LC03U	NAFTA, 15" & 17"	Wk??? or higher	SAA5647 HL/M1	LC03U11-2.03	9965 000 21083		Use scaler software S3xx 2.08	-	-
LC03U	NAFTA, 15" & 17"	Wk??? or higher	SAA5647 HL/M1	LC03U11-2.04	9965 000 23133			-	-
LC03L	LATAM, 15" & 17"	Wk??? or higher	SAA5647 HL/M1	LC03L11-2.00	9965 000 22372		Use scaler software S3xx 2.00	-	-
LC03L	LATAM, 15" & 17"	Wk??? or higher	SAA5647 HL/M1	LC03L11-2.01	9965 000 23134			-	-
LC03	15" Scaler board	Wk217 or higher	M29F002BT-90P1 (9322 190 48682)	S315 2.00	9965 000 18108		This Scaler software must always be used in combination with : -TV software LC03E21-2.00 (West Europe) or LC03E22-2.00 (East Europe) -NVML15_2.00 on position 7752	S315 2.11	9965 000 22752
LC03	15" Scaler board NVM	Wk??? or higher	M24C16-BN6 (9322 126 62682)	NVML15_2.00	9965 000 18153		This NVM can only be used in combination with the Scaler board software S315 2.00		
LC03	15" Scaler board	Wk??? or higher		S315 2.04	9965 000 19542		This Scaler software must always be used in combination with : -TV software LC03E21-2.03 (West Europe) or LC03E22-2.03 (East Europe) -NVML15_2.04 on position 7752	S315 2.11	9965 000 22752
LC03	15" Scaler board NVM	Wk??? or higher		NVML15_2.04	9965 000 19543		This NVM can only be used in combination with the Scaler board software S315 2.04		
LC03	15" Scaler board	Wk??? or higher		S315 2.06	9965 000 19542		This Scaler software must always be used in combination with : -TV software LC03E21-2.03 (West Europe) or LC03E22-2.03 (East Europe) -NVML15_2.04 on position 7752	S315 2.11	9965 000 22752
LC03	15" Scaler board NVM	Wk??? or higher		NVML15_2.06	9965 000 19543		This NVM can only be used in combination with the Scaler board software S315 2.04		
LC03	15" Scaler board	Wk??? or higher		S315 2.07	9965 000 22638		This Scaler software must always be used in combination with : -TV software LC03E21-2.05 (West Europe) or LC03E22-2.05 (East Europe) -NVML15_2.07 on position 7752	S315 2.11	9965 000 22752
LC03	15" Scaler board NVM	Wk??? or higher		NVML15_2.07	9965 000 22633		This NVM can only be used in combination with the Scaler board software S315 2.07		
LC03	15" Scaler board	Wk??? or higher		S315 2.08	9965 000 21189		This Scaler software must always be used in combination with : -TV software LC03E21-2.07 (West Europe) or LC03E22-2.07 (East Europe) -NVML15_2.08 on position 7752	S315 2.11	9965 000 22752

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CHASSIS	FAMILY	PRODUCTION CODE	uP TYPE/VERSION	IDENT	SERVICE CODE	HOTEL MODE ?	REMARKS TYPICAL FOR THIS SOFTWARE	REPLACED BY	
								IDENT	SERVICE CODE
LC03	15" Scaler board NVM	Wk??? or higher		NVML15_2.08	9965 000 21188		This NVM can only be used in combination with the Scaler board software S315 2.08		
LC03	15" Scaler board	Wk??? or higher		S315 2.11	9965 000 22752		This Scaler software must always be used in combination with : -TV software LC03E21-2.09 (West Europe) or LC03E22-2.09 (East Europe) -NVML15_2.11 on position 7752	-	-
LC03	15" Scaler board NVM	Wk??? or higher		NVML15_2.11	9965 000 22753		This NVM can only be used in combination with the Scaler board software S315 2.11		
LC03	15" Scaler board	Wk??? or higher		S315 2.21	9965 000 22763	ips	This Scaler software must always be used in combination with : -TV software LC03E21-2.09 (West Europe) or LC03E22-2.09 (East Europe) -NVML15_2.21 on position 7752	-	-
LC03	15" Scaler board NVM	Wk??? or higher		NVML15_2.21	9965 000 22765		This NVM can only be used in combination with the Scaler board software S315 2.21		
LC03	15" Scaler board	Wk??? or higher		S315 2.24	9655 000 25406	ips	This Scaler software must always be used in combination with : -TV software LC03E21-2.09 (West Europe) or LC03E22-2.09 (East Europe) -NVML15_2.21 on position 7752	-	-
LC03	15" Scaler board NVM	Wk??? or higher	M24C02-WMN6 (9352 145 26668)	DDC15	9965 000 18148		This NVM is compatible with all TV and 15" Scaler board software versions		
LC03	17" Scaler board	Wk217 or higher		S317 2.00	9965 000 18098		This Scaler software must always be used in combination with : -TV software LC03E21-2.00 (West Europe) or LC03E22-2.00 (East Europe) -NVML15_2.00 on position 7752	S317 2.11	9965 000 22761
LC03	17" Scaler board NVM	Wk??? or higher		NVML17_2.00	9965 000 18154		This NVM can only be used in combination with the Scaler board software S317 2.00		
LC03	17" Scaler board	Wk??? or higher		S317 2.04	9965 000 19550		This Scaler software must always be used in combination with : -TV software LC03E21-2.03 (West Europe) or LC03E22-2.03 (East Europe) -NVML15_2.00 on position 7752	S317 2.11	9965 000 22761
LC03	17" Scaler board NVM	Wk??? or higher		NVML17_2.04	9965 000 19551		This NVM can only be used in combination with the Scaler board software S317 2.04		
LC03	17" Scaler board	Wk??? or higher		S317 2.07	9965 000 22634		This Scaler software must always be used in combination with : -TV software LC03E21-2.05 (West Europe) or LC03E22-2.05 (East Europe) -NVML15_2.07 on position 7752	S317 2.11	9965 000 22761
LC03	17" Scaler board NVM	Wk??? or higher		NVML17_2.07	9965 000 22641		This NVM can only be used in combination with the Scaler board software S317 2.07		
LC03	17" Scaler board	Wk??? or higher		S317 2.08	9965 000 21195		This Scaler software must always be used in combination with : -TV software LC03E21-2.07 (West Europe) or LC03E22-2.07 (East Europe) -NVML15_2.08 on position 7752	S317 2.11	9965 000 22761
LC03	17" Scaler board NVM	Wk??? or higher		NVML17_2.08	9965 000 21196		This NVM can only be used in combination with the Scaler board software S317 2.08		
LC03	17" Scaler board	Wk??? or higher		S317 2.11	9965 000 22761		This Scaler software must always be used in combination with : -TV software LC03E21-2.00 (West Europe) or LC03E22-2.00 (East Europe) -NVML17_2.11 on position 7752	-	-
LC03	17" Scaler board NVM	Wk??? or higher		NVML17_2.11	9965 000 22762	tn	This NVM can only be used in combination with the Scaler board software S317 2.11		
LC03	17" Scaler board	Wk??? or higher		S317 2.21	9965 000 22764	ips	This Scaler software must always be used in combination with : -TV software LC03E21-2.09 (West Europe) or LC03E22-2.09 (East Europe) -NVML17_2.21 on position 7752	-	-
LC03	17" Scaler board NVM	Wk??? or higher		NVML17_2.21	9965 000 22766		This NVM can only be used in combination with the Scaler board software S317 2.21		
LC03	17" Scaler board	Wk??? or higher		S317 2.23	9655 000 24207	ips		-	-
LC03	17" Scaler board	Wk??? or higher		S317 2.24	9655 000 25419	ips	This Scaler software must always be used in combination with : -TV software LC03E21-2.09 (West Europe) or LC03E22-2.09 (East Europe) -NVML17_2.21 on position 7752	-	-
LC03	17" Scaler board NVM	Wk??? or higher	M24C02-WMN6 (9352 145 26668)	DDC17	9965 000 18149		This NVM is compatible with all TV and 15" Scaler board software versions		
LC03	23" Scaler board	Wk??? or higher		S323 2.08	9965 000 26634			-	-
LC03	23" Scaler board NVM	Wk??? or higher		NVML23_2.08	9965 000 26636				
LC03	23" Scaler board	Wk??? or higher		S323 2.09	9965 000 21053			-	-
LC03	23" Scaler board NVM	Wk??? or higher		NVML23_2.09	9965 000 21055				
LC03	23" Scaler board	Wk??? or higher		S323 2.21	9965 000 26637			-	-
LC03	23" Scaler board NVM	Wk??? or higher		NVML23_2.21	9965 000 26638				
LC03	23" Scaler board NVM	Wk??? or higher	M24C02-WMN6 (9352 145 26668)	DDC23	9965 000 21054				
LC13A	AP, VGA	Wk3?? or higher	SAA5667HL/M1	LC13AG1-1.00	9965 000 23163			LC13EG1-1.05	9965 000 23142
LC13A	AP, XGA	Wk3?? or higher	SAA5667HL/M1	LC13AX1-1.00	9965 000 23164			LC13EG1-1.05	9965 000 23142
LC13E	West Europe, VGA	Wk335 or higher	SAA5667HL/M1	LC13EG1-1.01	3111 250 54961			LC13EG1-1.07	3111 250 55041
LC13E	West Europe, VGA	Wk338 or higher	SAA5667HL/M1	LC13EG1-1.02				LC13EG1-1.07	3111 250 55041
LC13E	West Europe, VGA	Wk341 or higher	SAA5667HL/M1	LC13EG1-1.03	3111 250 54981			LC13EG1-1.07	3111 250 55041
LC13E	West Europe, VGA	Wk3?? or higher	SAA5667HL/M1	LC13EG1-1.05	9965 000 23142			LC13EG1-1.07	3111 250 55041
LC13E	West Europe, VGA	Wk3?? or higher	SAA5667HL/M1	LC13EG1-1.07	3111 250 55041			-	-
LC13E	East Europe, VGA	Wk335 or higher	SAA5667HL/M1	LC13EG2-1.01				LC13EG2-1.07	3111 250 55051
LC13E	East Europe, VGA	Wk338 or higher	SAA5667HL/M1	LC13EG2-1.02				LC13EG2-1.07	3111 250 55051
LC13E	East Europe, VGA	Wk341 or higher	SAA5667HL/M1	LC13EG2-1.03	3111 250 55001			LC13EG2-1.07	3111 250 55051
LC13E	East Europe, VGA	Wk3?? or higher	SAA5667HL/M1	LC13EG2-1.05	9965 000 23143			LC13EG2-1.07	3111 250 55051
LC13E	East Europe, VGA	Wk3?? or higher	SAA5667HL/M1	LC13EG2-1.07	3111 250 55051			-	-
LC13E	West Europe, XGA	Wk3?? or higher	SAA5667HL/M1	LC13EX1-1.03				LC13EG2-1.05	9965 000 23143
LC13E	West Europe, XGA	Wk3?? or higher	SAA5667HL/M1	LC13EX1-1.05	3111 250 55061			-	-
LC13E	East Europe, XGA	Wk3?? or higher	SAA5667HL/M1	LC13EX2-1.03				LC13EG2-1.05	9965 000 23143
LC13E	East Europe, XGA	Wk3?? or higher	SAA5667HL/M1	LC13EX2-1.05	3111 250 55071				

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CHASSIS	FAMILY	PRODUCTION CODE	uP TYPE/VERSION	IDENT	SERVICE CODE	HOTEL MODE ?	REMARKS TYPICAL FOR THIS SOFTWARE	REPLACED BY IDENT	REPLACED BY SERVICE CODE
LC13U	Nafta, VGA	Wk3?? or higher	SAA5667HL/M1	LC13UG1-1.04	9965 000 23145			LC13UG1-1.04	9965 000 23145
LC13U	Nafta, XGA	Wk3?? or higher	SAA5667HL/M1	LC13UX1-1.04	9965 000 23146			LC13UG1-1.04	9965 000 23145
LC4.1A	Hercules, No pixel plus		TDA15021H/N1A11	LC41AP1_1.00	3139 127 02791			LC41AP1_1.03	3139 127 03901
LC4.1A	Hercules, No pixel plus, China		TDA15011H/N1A50	LC41AP1_1.03	3139 127 03901				
LC4.1E	Hercules, No pixel plus, WE		TDA15021H/N1A11	LC41EP1_1.00	3139 127 02311			LC41EP1_1.04	3139 127 02312
LC4.1E	Hercules, No pixel plus, WE		TDA15021H/N1A11	LC41EP1_1.04	3139 127 02312				
LC4.1E	Hercules, No pixel plus,EE		TDA15021H/N1A11	LC41EP2_1.00	3139 127 02301			LC41EP2_1.04	3139 127 02302
LC4.1E	Hercules, No pixel plus,EE		TDA15021H/N1A11	LC41EP2_1.04	3139 127 02302				
LC4.1L	Hercules, No pixel plus		TDA15011H/N1A50	LC41LP1_1.01	3139 127 02801				
LC4.1U	Hercules, No pixel plus		TDA15001H/N1A50	LC41UN1_1.01	3139 127 02431			LC41UN1_1.04	3139 127 02432
LC4.1U	Hercules, No pixel plus		TDA15001H/N1A50	LC41UN1_1.04	3139 127 02432				
LC4.1A	Scaler, XGA			S41RV1_AP_1.01	3139 127 03251				
LC4.1A	Scaler, XGA, China			S41RV1_CHINA_1.03	3139 127 03871				
LC4.1E	Scaler WE, VGA	Wk435 or higher		S41EV1_1.02	3139 127 02351			S41EV1_1.06	3139 127 02352
LC4.1E	Scaler WE, VGA			S41EV1_1.06	3139 127 02352				
LC4.1E	Scaler, EE, VGA	Wk435 or higher		S41EV2_1.02	3139 127 02361			S41EV2_1.06	3139 127 02362
LC4.1E	Scaler, EE, VGA			S41EV2_1.06	3139 127 02362				
LC4.1E	Scaler, WE, XGA	Wk435 or higher		S41EX1_1.02	3139 127 02331			S41EX1_1.05	3139 127 02332
LC4.1E	Scaler, WE, XGA			S41EX1_1.05	3139 127 02332				
LC4.1E	Scaler, EE, XGA	Wk435 or higher		S41EX2_1.02	3139 127 02341			S41EX2_1.05	3139 127 02342
LC4.1E	Scaler, EE, XGA			S41EX2_1.05	3139 127 02342				
LC4.1L	Scaler, XGA			S41RX1_LTM_1.00	3139 127 03241			S41RX1_1.03	3139 127 02411
LC4.1L	Scaler, XGA			S41RX1_LTM_1.01	3139 127 03242				
LC4.1U	Scaler, VGA	Wk4xx or higher		S41RV1_1.01	3139 127 02401				
LC4.1U	Scaler, XGA	Wk4xx or higher		S41RX1_1.03	3139 127 02411				
LC4.1U	Scaler, XGA	Wk4xx or higher		S41RX1_1.07	3139 127 02412				
LC4.1A/E/L/U	DDC VGA	Wk432 or higher		DDC - 15LPLNTN	3139 127 02461				
LC4.1A/E/L/U	DDC VGA	Wk432 or higher		DDC - 17LPLIPS	3139 127 02471				
LC4.1A/E/L/U	DDC VGA	Wk442 or higher		DDC- 20LPLIPS	3139 127 03851			DDC- 20LPLIPS	3139 127 03852
LC4.1A/E/L/U	DDC VGA	Wk502 or higher		DDC- 20LPLIPS	3139 127 03852				
LC4.1A/E/L/U	DDC VGA	Wk432 or higher		DDC - 23QDITN	3139 127 02321				
LC4.2A	Hercules			LC42AP1 _1.08	3139 127 01391			LC42AP1 _1.09	3139 127 01392
LC4.2A	Hercules			LC42AP1 _1.09	3139 127 01392				
LC4.2A	Hercules, Pixel plus			LC42AX1 _1.02	3139 127 02031			LC42AX1 _1.03	3139 127 02032
LC4.2A	Hercules, Pixel plus			LC42AX1 _1.03	3139 127 02032				
LC4.2A	Hercules, Arch 3			LC42AA3 _1.00	3139 127 03571			LC42AA3 _1.01	3139 127 03572
LC4.2A	Hercules, Arch 3			LC42AA3 _1.01	3139 127 03572				
LC4.2A	Hercules			LC42HA1_1.00	3139 127 03521			LC42HA1_1.0808	3139 127 03522
LC4.2A	Hercules			LC42HA1_1.0808	3139 127 03522				
LC4.2E	Hercules, WE	Wk419 or higher		LC42EP1 _1.05			For this TV software use Scaler software S42GV1_1.04		
LC4.2E	Hercules, WE	Wk420 or higher		LC42EP1_ 1.07			Removing of info line in AV, Blue mute sync problem, Containement action for "0" OSD caracter on screen, Nicam sound loose and Light Sensor reaction time For this TV software use Scaler software S42GV1_1.06		
LC4.2E	Hercules, WE	Wk428 or higher		LC42EP1_ 1.09	3139 127 01411		ATS in UK for CH4 For this TV software use Scaler software S42GV1_1.06	LC42EP1_ 3.03	3139 127 01412
LC4.2E	Hercules, WE	Wk428 or higher		LC42EP1 _1.11			Mistake in Italian language (Full srceen/Wide Screen), TXT possible in RGB mode, Removing of Wall Paper in FM Radio, info line removed and improvment of starting-up issue for 17" For this TV software use Scaler software S42GV1_1.06		
LC4.2E	Hercules, WE	Wk437 or higher		LC42EP1_ 3.03	3139 127 01412		For this TV software use Scaler software S42GTD 1_1.03	LC42EP1_ 3.05	3139 127 01413
LC4.2E	Hercules, WE	Wk438 or higher		LC42EP1_ 3.04			For this TV software use Scaler software S42GTD 1_1.04		
LC4.2E	Hercules, WE			LC42EP1_ 3.05	3139 127 01413				
LC4.2E	Hercules, Pixel plus	TV software		LC42EX1_1.00					
LC4.2E	Hercules, Pixel plus	TV software		LC42EX1_1.02	3139 127 02001			LC42EX1_1.04	3139 127 02002
LC4.2E	Hercules, Pixel plus	TV software		LC42EX1_1.04	3139 127 02002				
LC4.2E	Hercules, Arch 3	TV software		LC42EA3_1.01	3139 127 03221			LC42EX1_1.04	3139 127 03222
LC4.2E	Hercules, Arch 3	TV software		LC42EA3_1.02	3139 127 03222				
LC4.2E	Hercules, Arch 3	TV software		LC42EA3_1.05	3139 127 03792				
LC4.2E	Hercules, Streamium	TV software		LC42ES1_1.01	3139 127 03471				
LC4.2U	Hercules	TV software		LC42UN1_1.10	3139 127 01402				

Software Survey

SOFTWARE SURVEY

CHASSIS	FAMILY	PRODUCTION CODE	uP TYPE/VERSION	IDENT	SERVICE CODE	HOTEL MODE ?	REMARKS TYPICAL FOR THIS SOFTWARE	REPLACED BY	
								IDENT	SERVICE CODE
LC4.2U	Hercules, Pixel plus	TV software		LC42UX1_1.05	3139 127 02061			LC42UX1_1.07	3139 127 02062
LC4.2U	Hercules, Pixel plus	TV software		LC42UX1_1.07	3139 127 02062				
LC4.2U	Hercules, Streamium	TV software		LC42US1_1.00	3139 127 03411				
LC4.2U	Hercules, Arch 3	TV software		LC42UA3_1.01	3139 127 03562				
LC4.2U	Hercules	TV software		LC42HU1_1.1011	3139 127 02561			LC42HU1_1.1013	3139 127 02562
LC4.2U	Hercules	TV software		LC42HU1_1.1013	3139 127 02562				
LC4.2A/E/L/U	Scaler			S42GV1_1.00				S42GV1_1.04	
LC4.2A/E/L/U	Scaler			S42GV1_1.04				S42GV1_1.06	
LC4.2A/E/L/U	Scaler			S42GV1_1.06				S42GV1_1.08	
LC4.2A/E/L/U	Scaler			S42GV1_1.08				S42GV1_1.09	
LC4.2A/E/L/U	Scaler			S42GV1_1.09				S42GV1_1.11	3139 127 01342
LC4.2A/E/L/U	Scaler			S42GV1_1.11	3139 127 01342			S42GV1_1.13	3139 127 01343
LC4.2A/E/L/U	Scaler			S42GV1_1.13	3139 127 01343				
LC4.2A/E/L/U	Scaler, Pixel Plus			S42GTP_1.00				S42GTP_1.09	3139 127 02091
LC4.2A/E/L/U	Scaler, Pixel Plus			S42GTP_1.09	3139 127 02091			S42GTP_1.12	3139 127 02092
LC4.2A/E/L/U	Scaler, Pixel Plus			S42GTP_1.12	3139 127 02092				
LC4.2A/E/L/U	Scaler, DMR/Streamium			S42GTD_1.00				S42GTD 1_1.03	
LC4.2A/E/L/U	Scaler, DMR/Streamium			S42GTD 1_1.03				S42GTD 1_1.04	
LC4.2A/E/L/U	Scaler, DMR/Streamium			S42GTD 1_1.04	3139 127 02972			S42GTD 1_1.07	3139 127 02973
LC4.2A/E/L/U	Scaler, DMR/Streamium			S42GTD 1_1.07	3139 127 02973				
LC4.2A/E/L/U	Scaler			S42GSD_1.06	3139 127 03481				
LC4.2	EPLD				3122 357 00601				3122 357 00602
LC4.2	EPLD				3122 357 00602				
LC4.2	DDC VGA			DDC VGA 26 LC04	3139 127 01491				
LC4.2	DDC VGA			DDC VGA 23 LC04	3139 127 01501				
LC4.2	DDC VGA			DDC VGA 17	3139 127 01511				
LC4.2	DDC VGA			DDC VGA 26 LC04PP	3139 127 01891				
LC4.2	DDC VGA			DDC VGA 23 LC04PP	3139 127 01931				
LC4.2	DDC VGA			DDC VGA 26 NA LC04PP	3139 127 01971				
LC4.2	DDC VGA			DDC VGA 23 NA LC04PP	3139 127 01991				
LC4.2	DDC VGA			DDC VGA 23 STREAMIUM	3139 127 02501				
LC4.2	DDC VGA			DDC VGA 17 LC04 DMR	3139 127 02521				
LC4.2	DDC VGA			DDC VGA 26 ARCH3 LCO4	3139 127 03151				
LC4.2	DDC VGA			DDC VGA 23HF9472	3139 127 03291				
LC4.2	DDC VGA			DDC VGA 23HF9442	3139 127 03301				
LC4.2	DDC VGA			DDC VGA 26FW5220	3139 127 03321				
LC4.2	DDC VGA			DDC VGA 23FW5220	3139 127 03341				
LC4.2	DDC VGA			DDC VGA 26HF9472	3139 127 03371				
LC4.2A/E/L/U	DDC DVI			DDC DVI 17 LC04	3139 127 01481			DDC DVI 17 LC04	3139 127 01482
LC4.2A/E/L/U	DDC DVI			DDC DVI 17 LC04	3139 127 01482				
LC4.2A/E/L/U	DDC DVI			DDC DVI 23 LC04	3139 127 01471			DDC DVI 23 LC04	3139 127 01472
LC4.2A/E/L/U	DDC DVI			DDC DVI 23 LC04	3139 127 01472				
LC4.2A/E/L/U	DDC DVI			DDC DVI 26 LC04	3139 127 01462				
LC4.2A/E/L/U	DDC DVI			DDC DVI 23 LC04PP	3139 127 01951			DDC DVI 23 LC04PP	3139 127 01952
LC4.2A/E/L/U	DDC DVI			DDC DVI 23 LC04PP	3139 127 01952				
LC4.2A/E/L/U	DDC DVI			DDC DVI 26 LC04PP	3139 127 01912				
LC4.2A/E/L/U	DDC DVI			DDC DVI 23 STREAMIUM	3139 127 02491				
LC4.2A/E/L/U	DDC DVI			DDC DVI 26 ARCH3 LCO4	3139 127 03142				
LC4.2A/E/L/U	DDC DVI			DDC DVI 26HF9472IPS	3139 127 03631				
LC4.2A/E/L/U	DDC DVI			DDC DVI 23HF9472IPS	3139 127 03641				
LC4.2A/E/L/U	DDC DVI			DDC DVI 23HF9442IPS	3139 127 03651				
LC4.2	DDC HDMI			DDC HDMI 17 LC04	3139 127 01451			DDC HDMI 17 LC04	3139 127 01452
LC4.2	DDC HDMI			DDC HDMI 17 LC04	3139 127 01452				
LC4.2	DDC HDMI			DDC HDMI 23 LC04PP	3139 127 01442				
LC4.2	DDC HDMI			DDC HDMI 26 LC04PP	3139 127 01432				
LC4.2	DDC HDMI			DDC HDMI 23 STREAMIUM	3139 127 02631				
LC4.2	DDC HDMI			DDC HDMI 23FW5220	3139 127 03701				
LC4.2	DDC HDMI			DDC HDMI 26FW5220	3139 127 03691				
LC4.5E	Hercules			LC4EV5-V1.09	3139 127 04064			LC42AP1 _1.09	3139 127 01392
LC4.5E	Scaler			SR04SD12-V1.06	3139 127 04015			S42GV1_1.04	
LC4.5E	DDC VGA			DDC VGA 32 LC04SD12	3139 127 03981				
LC4.6E	uP (Hercules)	TV software		HER_LC04_EUR_L_U_V2.00	3104 317 06861				
LC4.6E	uP (Hercules)	TV software		HER_LC04_EUR_L_C_V2.04	3104 317 07221				
LC4.6E	uP (Hercules)	TV software		HER_LC04_EUR_L_C_V2.05	3104 317 07371				
LC4.6E	uP (Hercules)	TV software		HER_LC04_EUR_L_C_V2.06	3104 317 07831				
LC4.6E	uP (Hercules)	TV software		LC4EV1_2.08	3104 317 07832				

Software Survey

SOFTWARE SURVEY

CHASSIS	FAMILY	PRODUCTION CODE	uP TYPE/VERSION	IDENT	SERVICE CODE	HOTEL MODE ?	REMARKS TYPICAL FOR THIS SOFTWARE	REPLACED BY	
								IDENT	SERVICE CODE
LC4.6E	Scaler (Genesis)			GEN_LC04_EUR_L_V2.00	3104 317 06881				
LC4.6E	Scaler (Genesis)			GEN_LC04_EUR_L_V2.02	3104 317 07211				
LC4.6E	Scaler (Genesis)			GEN_LC04_EUR_L_V2.07	3104 317 07741				
LC4.6E	Scaler (Genesis)			GEN_LC04_EUR_L_V2.08	3104 317 07851				
LC4.6E	Scaler (Genesis)			SR04SXR1_2.10	3104 317 07852				
LC4.6A	uP (Hercules)	TV software		LC46_HERC_AC_L_N.NN_XXX	3104 317 08071			LC46_HERC_AC_L_1.07B_08	3104 317 08241
LC4.6A	uP (Hercules)	TV software		LC46_HERC_AC_L_1.07B_082	3104 317 08241				
LC4.6A	Scaler (Genesis)			LC46_GEN_AC_L_2.04_0811.1	3104 317 08111			GEN_LC04_EUR_L_V2.02	3104 317 07211
LC4.6U	uP (Hercules)	TV software		LC46_HERC_UC_L_1.06_0806	3104 317 08061			LC46_HERC_UC_L_1.08_081	3104 317 08181
LC4.6U	uP (Hercules)	TV software		LC46_HERC_UC_L_1.08_0818.	3104 317 08181				
LC4.6U	Scaler (Genesis)			LC46_GEN_UC_L_2.02_08101	3104 317 08101			LC46_GEN_UC_L_2.04_0819	3104 317 08191
LC4.6U	Scaler (Genesis)			LC46_GEN_UC_L_2.04_0819.1	3104 317 08191				
LC4.6L	uP (Hercules)	TV software		LC46 HERC LC L 1.00 0869.1	3104 317 08691			LC46_HERC_UC_L_1.08_081	3104 317 08181
LC4.6L	Scaler (Genesis)			LC46 GEN LC L 1.00 0871.1	3104 317 08711			LC46_GEN_UC_L_2.04_0819	3104 317 08191
LC4.6E	DDC (VGA)			EDID VGA 30LCD LC04SD	3104 317 06681		EDID VGA 30LCD LC04SD		
LC4.6A/U/L	DDC (HDMI)			EDID HDMI 30LCD LC04SD	3104 317 07151				
LC4.7E	uP (Hercules)	TV software		HERC_LC04_EUR_P_C_V2.06	3104 317 07891				
LC4.7E	Scaler (Genesis)			GEN LC04 EUR P V2.06	3104 317 07511				
LC4.7A	uP (Hercules)	TV software		LC46_HERC_AC_P_1.07B_082 3.1	3104 317 08231			LC46_HERC_AC_L_1.07B_08 24.1	3104 317 08241
LC4.7A	Scaler (Genesis)			LC46_GEN_AC_P_N.NN_XXXX	3104 317 08131			GEN_LC04_EUR_L_V2.02	3104 317 07211
LC4.7U	uP (Hercules)	TV software		LC46_HERC_UC_P_1.09_0820.	3104 317 08202			LC46_HERC_UC_L_1.08_081	3104 317 08181
LC4.7U	Scaler (Genesis)			LC46_GEN_UC_P_2.04_0821.1	3104 317 08211			LC46_GEN_UC_L_2.04_0819	3104 317 08191
LC4.7L	uP (Hercules)	TV software		LC46 HERC LC P 1.00 0870.1	3104 317 08701			LC46_HERC_UC_L_1.08_081	3104 317 08181
LC4.7L	Scaler (Genesis)			LC46 GEN LC P 1.00 0872.1	3104 317 08721			LC46_GEN_UC_L_2.04_0819	3104 317 08191
LC4.7E	DDC (VGA)			EDID VGA 37 PDP LC04SD	3104 317 06691				
LC4.7A/U/L	DDC (VGA)			EDID VGA 42 PDP LC04SD	3104 317 06701				
LC4.7A/U/L	DDC (HDMI)			EDID HDMI 42 PDP LC04SD	3104 317 07171				

Model Number Survey

MODEL	STYLING	CHASSIS	RC	SYSTEM	SOUND	SIZE	VOLTRANGE	TUNER	OPTION CODES							
				P-..=PAL S-..=SECAM N-..=NTSC	N-..=NICAM F-..=FM/FM	wxhxd (cm)			1	2	3	4	5	6	7	8
107FP4/10	505	LC4.6E	RC4333/01					UV1318S/A IH-3								
14HT3154N/01	350	L01.2E														
14PF6826/00	546	TF1.1E														
14PF6826/01	546	TF1.1E														
14PF6826/05	546	TF1.1E														
14PF6826/58	546	TF1.1E														
14PF7846/12	519	LC4.1E	RC19335019/01	P-BGDKI,S-BGDKLL'	F-BG,N-BGDKIL,BI NICAM BG/2CS-BG	220V	38x39x49	UR1316R/A I H-3	See sticker in set							
14PF7846/58	519	LC4.1E	RC19335019/01	P-BGDKI,S-BGDK	F-BG,N-BGDKIL,BI NICAM BG/2CS-BG	AutoMulti-Voltage	38x39x18	UR1316/A I H-3	See sticker in set							
14PT2010/69R	413	T1.1A	08-1465-RMY	P-BGDK,S-BGDK	2CS stereo	90-276AutoV	33x37x44	UV1355-BK2	Not applicable							
14PT2014/56R	413	TC2.1A	06-015W30-A171X	P-BGDK,S-BGDK	Mono	90-276AutoV	33x37x44	UVS1053-EW	Not applicable							
14PT2110/56R	413	TC21.A	M28-2	P-BGDKI,S-BGDK	2CS BG stereo	90-260V	33x37x44	UV1355-BK2	Not applicable							
14PT2110/69R	413	TC2.1A	M28-2	P-BGDKI,S-BGDK	2CS BG stereo	90-260V	33x37x44	UV1355-BK2	Not applicable							
14PT2110/79R	413	TC2.1A	M28-2	P-BGDKI,S-BGDK	2CS BG stereo	90-260V	33x37x44	UV1355-BK2	Not applicable							
14PT6007/05	398	TDVD1.1E	RC19042013/01	P-BGDKI,S-BGDKLL'	F-BG,Mono	39x39x39	220-240V	CTT5020E/CFT5510	See sticker in set							
14PT6107/05N	398	TDVD1.1E	RC19042013/01	P-BGDKI,S-BGDKLL'	F-BG,Mono	220-240V	39x39x39	CTT5020E/CFT5510	Not applicable							
14PT6107/58N	398	TE1.1E	RCLE016	P-BGDKI,S-BGDKLL'	F-BG,Mono	220-240V	39x39x39	CTT5020E/CTF5510	See sticker in set							
14PT6107S/00	398	TDVD1.1E	RC19042013/01	P-BGDKI,S-BGDKLL'	F-BG,Mono	39x39x39	220-240V	CTT5020E/CFT5510	See sticker in set							
14PT6441/37	475	L03.1U	RC19036002/01A	N-M	B-DBX	90-140V	22x19x21	TEDH9-305A	65	215	65	162	204	201		
14RFL150/37C	475	L03.1U	RCLU012	N-M	B-DBX		90-140V	ENV56K06G3 & TEDH	65	215	67	162	196	201	64	
15FT9955/35	424	LC03U	RC19041006/01	N-M	AV S,B-DBX	AutoMulti-Voltage		UR1336/A F S H-3	See sticker in set							
15HF7835/69	446	LC13A	RC19335016/01	P-BGDKI,S-BGDKK1S-BGDKK1,N-M/4.43(5.5)	F-Korea/BG/China,N-BGDKI,BI NICAM BGD/2CS-BG	AutoMulti-Voltage	38x36x7	UR1316/A	127	55	79	239	128	0	0	0
15PF7835/37	446	LC13U	RC19335014/01	N-M	B-DBX	AutoMulti-Voltage	38x36x7	UR1336/A F	253	111	205	155	0	0	0	0
15PF7835/69I	446	LC13A	RC19335016/01	P-BGDKI,S-BGDKK1S-BGDKK1,N-M/4.43(5.5)	F-Korea/BG/China,N-BGDKI,BI NICAM BGD/2CS-BG	AutoMulti-Voltage	38x36x7	UR1316/A	127	55	79	237	128	0	0	0
15PF7835/69S	446	LC13A	RC19335016/01	P-BGDKI,S-BGDKK1S-BGDKK1,N-M/4.43(5.5)	F-Korea/BG/China,N-BGDKI,BI NICAM BGD/2CS-BG	AutoMulti-Voltage	38x36x7	UR1316/A	127	55	79	237	128	0	0	0
15PF7835/93	446	LC13A	RC19335016/01	P-BGDKI,S-BGDKK1S-BGDKK1,N-M/4.43(5.5)	F-Korea/BG/China,N-BGDKI,BI NICAM BGD/2CS-BG	AutoMulti-Voltage	38x36x7	UR1316/A	127	55	95	237	128	0	0	0
15PF7846/12	519	LC4.1E														
15PF7846/58	519	LC4.1E														
15PF8946/12	494	LC4.1E	RC1553801/01	P-BGDKI,S-BGDKLL'	F-BG,N-BGDKIL,BI NICAM BG/2CS-BG	AutoMulti-Voltage	47x35x17	UR1316/A I H-3	See sticker in set							
15PF8946/37	517	LC4.1U	RC19335021/01	N-M	B-DBX	AutoMulti-Voltage	46x34x17	UR1336/A FI S H-3	192	1	136	192	180	120	0	N.A.
15PF8946/58	494	LC4.1E	RC19335019/01	P-BGDKI,S-BGDK	F-BG,N-BGDKIL,BI NICAM BG/2CS-BG	AutoMulti-Voltage	47x35x17	UR1316/A I H-3	See sticker in set							
15PT1767/01	543	L01.2E														
15PT1767/05	543	L01.2E														
15PT6807/01G	437	TDVD2.1E	RC19042013/01	P-BGDKI,S-BGDKLL'	2CS-BG,F-BG,N-BGDKIL	220-240V	38x40x40	CTT5020E/CFT5510	Not applicable							
15PT6807/01H	437	TDVD2.1E	RC19042013/01	P-BGDKI,S-BGDKLL'	2CS-BG,F-BG,N-BGDKIL	220-240V	38x40x40	CTT5020E/CFT5510	Not applicable							
15PT6807/01I	437	TDVD2.1E	RC19042013/01	P-BGDKI,S-BGDKLL'	2CS-BG,F-BG,N-BGDKIL	220-240V	38x40x40	CTT5020E/CFT5510	Not applicable							
15PT6807/05N	437	TDVD2.1E	RC19042013/01	P-BGDKI,S-BGDKLL'	2CS-BG,F-BG,N-BGDKIL	220-240V	38x40x40	CTT5020E/CFT5510	Not applicable							
17FW9955/35	424	LC03U	RC19041006/01	N-M	AV S,B-DBX	AutoMulti-Voltage	52x31x7	UR1336/A F S H-3	See sticker in set							
17HF9945/69I	424	LC03A	RC19042009/01	P-BGDKI,S-BGDKK1S-BGDKK1,N-M/4.43(5.5)	AV S,F-Korea/BG/China,N-BGDKI,BI NICAM BGD/2CS-BG	AutoMulti-Voltage	52x31x7	UR1316/A I H-3	See sticker in set							
17HM8801/12	410	LC03E	RC19042008/01	P-BGDKI,S-BGDKLL'	2CS-BG,AV S,N-BG	AutoMulti-Voltage		UR1316/A I H-3	See sticker in set							
17HM8801/69	424	LC03A	RC19042009/01	P-BGDKI,S-BGDKK1S-BGDKK1,N-M/4.43(5.5)	AV S,F-Korea/BG/China,N-BGDKI,BI NICAM BGD/2CS-BG	AutoMulti-Voltage	32x51x7	UR1316/A I H-3								
17HT3154N/01	351	L01.2E														
17MW9010/37	424	LC03U	RC19041006/01	N-M	AV S,B-DBX	AutoMulti-Voltage	52x77x88	UR1336/A F S H-3	206	251	238	221	224	0	0	0
17PF8946/12	494	LC4.1E														
17PF8946/37	517	LC4.1U	RC19335021/01	N-M	B-DBX	AutoMulti-Voltage	51x34x17	UR1336/A FI S H-3	192	1	140	192	180	120	0	N.A.
17PF8946/58	494	LC4.1E														
17PF8946/79	517	LC4.1A		P-BGDKI,S-BGDKK1S-BGDKK1,N-M/4.43(5.5)	F-Korea/BG/China,N-BGDKI,BI NICAM BGD/2CS-BG		AutoMulti-Voltage									
17PF8946A/37	424	LC03U	RC19041006/01	N-M	B-DBX	AutoMulti-Voltage	52x31x7	UR1336/A F S H-3	See sticker in set							
17PF9946/12	493	LC4.1E	RC1553801/01	P-BGDKI,S-BGDKLL'	F-BG,N-BGDKIL,BI NICAM BG/2CS-BG	AutoMulti-Voltage	52x30x8		See sticker in set							
17PF9946/37	493	LC03U	RC1553803/01	N-M	B-DBX	AutoMulti-Voltage		UR1336/A F S H-3	See sticker in set							
17PF9946/79	518	LC4.2A	RC1553802/01	P-BGDKI,S-BGDKK1S-BGDKK1,N-M/4.43(5.5)	F-Korea/BG/China,N-BGDKI,BI NICAM BGD/2CS-BG	AutoMulti-Voltage	53x38x24	UR1316/A I H-3	128	180	12	0	244	95	128	N.A.
17PF9946/98	518	LC4.2A		P-BGDKI,S-BGDKK1S-BGDKK1,N-M/4.43(5.5)	F-Korea/BG/China,N-BGDKI,BI NICAM BGD/2CS-BG		AutoMulti-Voltage									
20DV6931/37R	397	L01.2U	RC19042007/01	N-M	B-DBX,B-USA	90-140V	20x20x19	ENV56D98G3	See sticker in set							
20DV6932/37R	397	L01.2U	RC19042007/01	N-M	B-DBX,B-USA	90-140V	20x20x19	ENV56D98G3	See sticker in set							
20DV6942/37	547	TC4.1U	08-HS46F0-M133A	N-M	BTSC		105-132V	07-457FR5-NX1	See sticker in set							
20HF7835/69	446	LC13A	RC19335016/01	P-BGDKI,S-BGDKK1S-BGDKK1,N-M/4.43(5.5)	F-Korea/BG/China,N-BGDKI,BI NICAM BGD/2CS-BG	AutoMulti-Voltage	48x44x8	UR1316/A	127	183	79	239	128	0	0	0
20HF9925/12Z	436	LCD1.20E	RC25109/01	P-BGI,S-LL'	N-BG,2SC-BG,AV S	95-264AutoV		TAFC-M130D	Not applicable							
20HF9925/19Z	436	LCD1.20E	RC25109/01	P-BG,S-BGLL'	2CS-BGDK,AV S,N-BGDK	95-264AutoV		TAFC-S120D	Not applicable							
20L135/37R	508	L01.1U	RC19335004/01	N-M	B-DBX	90-140 V	58x56x55	ENV56D98G3	See sticker in set							
20L140/35R	375	L01.1U	RC19335004/01	N-M	B-DBX	90-140V		ENV56D98G3	See sticker in set							
20L140/37C	529	L03.1U	RC19335004/01	N-M	B-DBX	90-140V	60x48x48	ENV56K06G3								
20L145/37C	529	L03.1U	RCLU012	N-M	B-DBX		90-140V	ENV56K06G3 & TEDH	65	215	67	162	196	201	64	
20L145/37R	375	L01.2U	RC19036001/01	N-M	B-DBX	90-140V		ENV56D98G3	See sticker in set							
20MS3341/37C	528	L03.1U	RC11128/17	N-M	B-DBX		90-140V	ENV56K06G3 & TEDH	65	215	65	2	192	73	64	
20MS3341/37R	374	L01.2U	RC1112917/17A	N-M	B-NonDBX	90-140V		TEDH9-305A	See sticker in set							
20PF7835/37	446	LC13U	RC19335014/01	N-M	BTSC	Automulti-Voltage	48x44x8	UR1336/A F	253	111	205	155	00	0	0	0
20PF7835/69I	446	LC13A	RC19335016/01	P-BGDKI,S-BGDKK1S-BGDKK1,N-M/4.43(5.5)	F-Korea/BG/China,N-BGDKI,BI NICAM BGD/2CS-BG	AutoMulti-Voltage	48x44x8	UR1316/A	127	183	79	237	128	0	0	0
20PF7835/69S	446	LC13A	RC19335016/01	P-BGDKI,S-BGDKK1S-BGDKK1,N-M/4.43(5.5)	F-Korea/BG/China,N-BGDKI,BI NICAM BGD/2CS-BG	AutoMulti-Voltage	48x44x8	UR1316/A	127	183	79	237	128	0	0	0
20PF7835/93	446	LC13A	RC19335016/01	P-BGDKI,S-BGDKK1S-BGDKK1,N-M/4.43(5.5)	F-Korea/BG/China,N-BGDKI,BI NICAM BGD/2CS-BG	AutoMulti-Voltage	48x44x8	UR1316/A	127	183	95	237	128	0	0	0
20PF7846/12	519	LC4.1E														
20PF7846/58	519	LC4.1E														
20PF8846/12	494	LC4.1E	RC1553801/01	P-BGDKI,S-BGDKLL'	F-BG,N-BGDKIL,BI NICAM BG/2CS-BG	AutoMulti-Voltage	58x39x9	UR1316R/A I H-3	See sticker in set							
20PF8846/58	494	LC4.1E	RC19335019/01	P-BGDKI,S-BGDK	F-BG,N-BGDKIL,BI NICAM BG/2CS-BG	AutoMulti-Voltage	58x39x9	UR1316R/A I H-3	See sticker in set							

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MODEL	STYLING	CHASSIS	RC	SYSTEM	SOUND	SIZE	VOLTRANGE	TUNER	OPTION CODES							
				P-..=PAL S-..=SECAM N-..=NTSC	N-..=NICAM F-..=FM/FM	wxhxd (cm)			1	2	3	4	5	6	7	8
20PF8846/79	517	LC4.1A		P-BGDKI,S-BGDKK1S-BGDKK1,N-M/4.43(5.5)	F-BG/China,N-BGDKI,BI NICAM BGD/2CS-BG		AutoMulti-Voltage									
20PF8846/98	517	LC4.1A		P-BGDKI,S-BGDKK1S-BGDKK1,N-M/4.43(5.5)	F-BG/China,N-BGDKI,BI NICAM BGD/2CS-BG		AutoMulti-Voltage									
20PF8946/37	517	LC4.1U	RC19335021/01	N-M	B-DBX	AutoMulti-Voltage	58x43x22	UR1336/A FI S H-3	192	1	136	64	180	120	0	N.A.
20PT5441/37	481	L03.1U	RC19036002/01A	N-M	B-DBX	90-140V	73x62x61	TEDH9-305A	65	215	65	162	204	201		
20PT6331/37C	528	L03.1U	RC19335004/01	N-M	B-DBX	90-140V	60x49x47	ENV56K06G3								
20PT6331/37R	375	L01.1U	RC19335004/01	N-M	B-NonDBX	90-140V		ENV56D98G3	See sticker in set							
20PT6341/37	483	L03.1U	RC19335004/01	N-M	BTSC	90-140V	73x62x61	TEDH9-305A	65	215	65	162	204	201		
20PT6431/35R	377	L01.2U	RC19335004/01	N-M	B-NonDBX	90-140V		ENV56D98G3	See sticker in set							
20PT6431/37C	530	L03.1U	RC19335004/01	N-M	B-DBX	90-140V	60x46x50	ENV56K06G3								
20PT6431/37R	377	L01.2U	RC19335004	N-M	B-NonDBX	90-140V		ENV56D98G3	See sticker in set							
20PT6441/37	484	L03.1U	RC19335004/01	N-M	B-DBX	90-140V	73x62x61	TEDH9-305A	65	215	67	162	204	201	64	
20PT6531/37R	397	L01.2U	RC19036001/01	N-M	B-NonDBX	90-140V		ENV56D98G3	See sticker in set							
21HT3154N/01	356	L01.2E														
21L145/85R	375	L01.2U	RC19036001/01	N-M	B-DBX	90-140V		ENV56D98G3	See sticker in set							
21PT1323/56S	375	L01.1A	RC19335003/01	P-BGDKI,S-BGDKK1S-BGDKK1,N-M/4.43(5.5)/4.43(6.5)/4.43	Mono	90-276AutoV	72x62x61	TEDE9-228B	See sticker in set							
21PT1323/67R	375	L01.1A	RC19335003	P-BGDKI	Mono	90-276AutoV	72x62x61	TEDE9-228B	See sticker in set							
21PT1323/69S	375	L01.1A	RC19335003	P-BGDKI	Mono	90-276AutoV	72x62x61	TEDE9-228B	0	23	65	0	192	144	11	129
21PT1617/60	555	L01.2E														
21PT1627/60	553	L01.2E														
21PT1867/58	340	L01.2E	RCLE011	P-BGDKI,S-BGDKLL	Mono	220-240V	60x49x49	UR1316R/A I-3	See sticker in set							
21PT2010/69R	413	T1.1A	08-2165-RMY	P-BG,S-BG	2CS BG stereo	90-276AutoV	60x46x37	UV1355-BK2	Not applicable							
21PT2014/56R	413	TC2.1A	06-015W30-A171X	P-BGDK,S-BGDK	Mono	90-276AutoV	60x46x37	UVS1053-EW	Not applicable							
21PT2110/56R	413	TC2.1A	M28-2	P-BGDKI,S-BGDK	2CS BG stereo	90-260V	60x46x37	UV1355-BK2	Not applicable							
21PT2110/69R	413	TC2.1A	M28-2	P-BGDKI,S-BGDK	2CS BG stereo	90-260V	60x46x37	UV1355-BK2	Not applicable							
21PT2110/79R	413	TC2.1A	M28-2	P-BGDKI,S-BGDK	2CS BG stereo	90-260V	60x46x37	UV1355-BK2	Not applicable							
21PT2124/71R	375	L01.2A	RC19335003/01	N-M	AV S	90-276 AutoV	66x54x54	TEDH9-305A	0	215	65	2	180	145	84	2
21PT2152/68R	375	L01.2A	RC19042001/01	P-BGDKI,S-BGDKK1,N-M/4.43(5.5)/4.43(6.5)	N-BGDKIID,2SC-BGDK,F-BG,AV S	90-276AutoV	67x56x55	UV1356A/AIG-3	176	247	65	168	226	209	44	
21PT2324/56R	312	L01.2A	RC19335003/01	P-BGBHDKI,N-M	Mono	90-276 AutoV	60x54x55	TEDE9-228B	0	215	65	0	208	145	92	4
21PT2324/56S	469	L01.2A	RC19335003/01	P-BGDKI,S-BGDKK1S-BGDKK1,N-M/4.43(5.5)/4.43(6.5)/4.43	Mono	90-276 AutoV	60x54x55	TEDE9-228B	0	215	65	0	208	145	92	4
21PT2324/67S	469	L01.2A	RC19335003/01	P-BGDKI	Mono	90-276 AutoV	60x54x55	TEDE9-228B	0	215	65	0	208	145	84	145
21PT2324/69R	469	L01.2A	RC19335003/01	P-BGDKI	Mono	90-276 AutoV	60x54x55	TEDE9-228B	0	215	65	0	208	145	84	129
21PT2324/69S	469	L01.2A	RC19335003/01	P-BGDKI	Mono	90-276 AutoV	60x54x55	TEDE9-228B	0	215	65	0	208	145	84	129
21PT2324/71R	469	L01.2A	RC19335003/01	N-M	Mono	90-276 AutoV	60x54x55	TEDH9-305A	0	215	65	0	80	145	84	2
21PT2324/79R	507	L01.2A	RCLA015	P-BGBHDKI	AV S		150-276V	TEDE9-228B	0	215	65	0	208	145	84	129
21PT3224/93R	507	L01.2A	RCLA015	P-DKI	AV S		180-276V	TEDE9-228B	9	215	65	4	244	145	83	1
21PT3323/56S	377	L01.1A	RC19335003/01	P-BGDKI,S-BGDKK1S-BGDKK1,N-M/4.43(5.5)/4.43(6.5)/4.43	AV S	90-276AutoV	72x62x61	TEDE9-228B	0	215	65	1	236	145	28	4
21PT3323/67R	377	L01.1A	RC19335003/01	P-BGDKI,S-BGDKK1S-BGDKK1,N-M/4.43(5.5)/4.43(6.5)/4.43	AV S	90-276AutoV	72x62x61	TEDE9-228B	0	215	65	1	236	145	28	16
21PT3323/69S	375	L01.1A	RC19042001/01	P-BGDKI,S-BGDKK1S-BGDKK1,N-M/4.43(5.5)/4.43(6.5)/4.43	AV S	90-276AutoV	72x62x61	TEDE9-228B	0	23	65	0	192	144	11	129
21PT3324/56R	397	L01.1A	RC19042001/01	P-BGBHDKI,N-M	2CS-BGDK,F-BG/China,N-BGDKI	90-276AutoV	60x46x49	TEDE9-228B	See sticker in set							
21PT3324/56S	377	L01.2A	RC19042001/01	P-BGDKI,S-BGDKK1S-BGDKK1,N-M/4.43(5.5)/4.43(6.5)/4.43	AV S	90-276 AutoV	67x54x58	TEDE9-228B	0	215	65	0	208	145	92	4
21PT3324/67S	377	L01.2A	RC19042001/01	P-BGDKI	AV S	90-276 AutoV	67x54x58	TEDE9-228B	8	215	65	4	244	153	84	145
21PT3324/69R	397	L01.2A	RC19042001/01	N-M, P-BGDKI	AV S	90-276V	67x54x58	TEDE9-228B	8	215	65	4	244	153	84	129
21PT3324/69S	377	L01.2A	RC19042001/01	N-M, P-BGDKI	AV S	90-276 AutoV	67x54x58	TEDE9-228B	8	215	65	4	244	153	84	129
21PT3324/71R	397	L01.2A	RC19335003/01	N-M	AV S	90-276V	67x54x58	TEDH9-305A	8	215	65	2	116	145	84	2
21PT3324/79R	397	L01.2A	RC19042001/01	N-M, P-BGDKI	AV S	150-276 V	67x54x58	TEDE9-228B	8	215	65	4	244	153	84	129
21PT4223/69R	377	L01.1A	RC19042001/01	P-BGDKI,S-BGDKK1S-BGDKK1,N-M/4.43(5.5)/4.43(6.5)/4.43	AV S,F-BG,N-BGDKI,BI NICAM BGD/2CS-BG	90-276AutoV	72x62x61	TEDE9-228B	0	215	65	170	252	145	92	129
21PT4223/69S	377	L01.1A	RC19042001/01	P-BGDKI,S-BGDKK1S-BGDKK1,N-M/4.43(5.5)/4.43(6.5)/4.43	AV S,F-BG,N-BGDKI,BI NICAM BGD/2CS-BG	90-276AutoV	72x62x61	TEDE9-228B	0	215	65	170	252	145	92	129
21PT4323/56S	397	L01.1A	RC19335003/01	P-BGDKI,S-BGDKK1S-BGDKK1,N-M/4.43(5.5)/4.43(6.5)/4.43	AV S,F-BG,N-BGDKI,BI NICAM BGD/2CS-BG	90-276AutoV	72x62x61	TEDE9-228B	0	215	81	170	252	145	92	4
21PT4323/67R	397	L01.1A	RC19335003/01	P-BGDKI,S-BGDKK1S-BGDKK1,N-M/4.43(5.5)/4.43(6.5)/4.43	AV S,F-BG,N-BGDKI,BI NICAM BGD/2CS-BG	90-276AutoV	72x62x61	TEDE9-228B	0	215	81	170	252	145	92	4
21PT4323/69S	397	L01.1A	RC19042001/01	P-BGDKI,S-BGDKK1S-BGDKK1,N-M/4.43(5.5)/4.43(6.5)/4.43	AV S,F-BG,N-BGDKI,BI NICAM BGD/2CS-BG	90-276AutoV	72x62x61	TEDE9-228B	0	215	81	170	252	145	92	4
21PT4458/01	340	L01.2A	RC19039001/01	P-BGDKI,S-BGDKLL'	F-BG,N-BGDKIL	220-240V	60x49x49	UR1316R/A I-3	See sticker in set							
21PT4458/05	340	L01.2A	RC19039001/01	P-BGI,S-BG	F-BG,N-BGI	220-240V	60x49x49	UR1316R/A I-3	See sticker in set							
21PT4458/58	340	L01.2A	RC19039001/01	P-BGDK,S-BGDK	F-BG/Czech,N-BGDK	220-240V	60x49x49	UR1316R/A I-3	See sticker in set							
21PT5207/60	459	L01.2A	RC19042001/01	P-BGDKI,S-BGDKK1S-BGDKK1,N-M	AV S	90-276AutoV	77x67x62	TEDE9-228B	See sticker in set							
21PT5217/60	552	L01.2E														
21PT529A/85R	375	L01.2L	RC19335004/01	N-M	B-NonDBX	90-276 AutoV	58x56x55	ENV56D98G3								
21PT5317/60	551	L01.2E														
21PT5409/01	420	L01.2E	RC19039001/01	P-BGDKI,S-BGDKLL'	F-BG,Mono,N-BGDKIL	220-240V	53x47x50	UV1317/A I G-3	See sticker in set							
21PT5458/01	353	L04E	RC19039001/01	P-BGDKI,S-BGDKLL'	F-BG,N-BGDKIL	220-240V	73x58x46	UV1316E/A I-4	See sticker in set							
21PT5509/01	491	L04E	RC19039001/01	P-BGDKI,S-BGDKLL'	F-BG,N-BGDKIL	220-240V	60x46x49	UV1316E/A I-4	See sticker in set							
21PT5518/01	491	L04E	RC19039001/01	P-BGDKI,S-BGDKLL'	F-BG,Mono,N-BGDKIL	220-240V	60x46x49	UR1316/A I -3	See sticker in set							
21PT5518/05	491	L04E	RC19039001/01	P-BGDKI,S-BGDKLL'	F-BG,Mono,N-BGDKIL	220-240V	60x46x49	UR1316R/A I -3	See sticker in set							
21PT5518/58	491	L04HE	RC19039001/01	P-BGDK,S-BGDK	F-BG/Czech,Mono,N-BGDKI	220-240V	60x46x49	UR1316/A I -3	See sticker in set							
21PT5618/01	490	L04E	RC4332/01	P-BGDKI,S-BGDKLL'	F-BG,Mono,N-BGDKIL	220-240V	60x47x51	UR1316R/A I -3	See sticker in set							
21PT5618/58	490	L04E	RC4332/01	P-BGDK,S-BGDK	F-BG/Czech,Mono,N-BGDKI	220-240V	60x47x51	UR1316/A I -3	See sticker in set							
21PT6341/44	484	L03.1L	RC19335004/01	N-M	BTSC	Auto Multi-Voltage	60x54x55	TEDH9-305A	65	215	65	161	204	201	0	0
23FW5220/37	518	LC4.2U			B-DBX		AutoMulti-Voltage									
23FW9955/35	427	LC03U	RC19041006/01	N-M	AV S,B-DBX	AutoMulti-Voltage	71x38x8	UR1336/A F S H-3	See sticker in set							
23HF9472/12	493	LC4.2E														
23HF9945/69I	427	LC03E	RC19042009/01	P-BGDKI,S-BGDKK1S-BGDKK1,N-M/4.43(5.5)	F-Korea/BG/China,N-BGDKI,BI NICAM BGD/2CS-BG	AutoMulti-Voltage	71x38x8	UR1316/A I H-3	See sticker in set							
23HM8801/12	421	LC03E	RC19042008/01	P-BGDKI,S-BGDKLL'	2CS-BG,AV S,N-BG	AutoMulti-Voltage		UR1316/A I H-3	See sticker in set							
23HM8801/69	427	LC03A	RC19042009/01	P-BGDKI,S-BGDKK1S-BGDKK1,N-M/4.43(5.5)	F-Korea/BG/China,N-BGDKI,BI NICAM BGD/2CS-BG	AutoMulti-Voltage	71x38x8	UR1316/A I H-3								

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MODEL	STYLING	CHASSIS	RC	SYSTEM	SOUND	SIZE	VOLTRANGE	TUNER	OPTION CODES							
				P-..=PAL S-..=SECAM N-..=NTSC	N-..=NICAM F-..=FM/FM	wxhxd (cm)			1	2	3	4	5	6	7	8
23HM8821/12	421	LC03E	RC19042008/01	P-BGDKI,S-BGDKLL'	2CS-BG,AV S,N-BG	AutoMulti-Voltage		UR1316/A I H-3	See sticker in set							
23HM8821/69	427	LC03A	RC19042009/01	P-BGDKI,S-BGDKK1S-BGDKK1,N-M/4.43(5.5)	F-Korea/BG/China,N-BGDKI,BI NICAM BGD/2CS-BG	AutoMulti-Voltage	71x38x8	UR1316/A I H-3								
23MW9010/37	427	LC03U	RC19041006/01	N-M	AV S,B-DBX	AutoMulti-Voltage	65x102x95	UR1336/A F S H-3	205	251	238	221	224	0	0	0
23MW9110/37	427	LC03U	RC19041006/01	N-M	AV S,B-DBX	AutoMulti-Voltage	65x44x95	UR1336/A F S H-3	205	251	238	221	224	0	0	0
23PF8946/12	494	LC4.1E														
23PF8946/37	517	LC4.1U	RC19335021/01	N-M	B-DBX	AutoMulti-Voltage	69x42x22	UR1336/A FI S H-3	192	1	140	192	180	120	0	N.A.
23PF8946/58	494	LC4.1E														
23PF8946A/37	427	LC03U	RC19041006/01	N-M	B-DBX	AutoMulti-Voltage	71x38x8	UR1336/A F S H-3	See sticker in set							
23PF9945/12A	421	LC03E	RC19042008/01	P-BGDKI,S-BGDKLL'	F-BG,N-BGDKIL,BI NICAM BG/2CS-BG	AutoMulti-Voltage	71x38x8	UR1316/A I H-3	See sticker in set							
23PF9946/12	493	LC4.2E	RC1553801/01	P-BGDKI,S-BGDKLL'	F-BG,N-BGDKIL,BI NICAM BG/2CS-BG	AutoMulti-Voltage	71x38x8	UR1316/A I H-3	See sticker in set							
23PF9946/37	493	LC4.2U	RC1553803/01	N-M	B-DBX	AutoMulti-Voltage	71x38x8	UV1336/A FI S H-3	See sticker in set							
23PF9946/79	493	LC4.2A	RC1553802/01	P-BGDKI,S-BGDKK1S-BGDKK1,N-M/4.43(5.5)	F-Korea/BG/China,N-BGDKI,BI NICAM BGD/2CS-BG	AutoMulti-Voltage	71x38x8	UR1316/A I H-3	See sticker in set							
23PF9946/98	493	LC4.2A	RC1553802/01	P-BGDKI,S-BGDKK1S-BGDKK1,N-M/4.43(5.5)	F-Korea/BG/China,N-BGDKI,BI NICAM BGD/2CS-BG	AutoMulti-Voltage	71x38x8	UR1316/A I H-3	See sticker in set							
23PF9956/12	493	LC04.2E														
23PF9956/79	518	LC4.2A	RC1553805/01	P-BGDKI,S-BGDKK1S-BGDKK1,N-M/4.43(5.5)	F-Korea/BG/China,N-BGDKI,BI NICAM BGD/2CS-BG	AutoMulti-Voltage	68x43x24	UR1316/A I H-3	128	180	12	0	252	95	128	N.A.
23PF9956/98	518	LC4.2A		P-BGDKI,S-BGDKK1S-BGDKK1,N-M/4.43(5.5)	F-Korea/BG/China,N-BGDKI,BI NICAM BGD/2CS-BG		AutoMulti-Voltage									
23PF9966/37	493	LC4.2U	RC1553803/01	N-M	B-DBX	AutoMulti-Voltage	71x38x8	UR1336/A FI S H-3	See sticker in set							
24PT6331/37R	326	L01.1U	RC19036001/01	N-M	B-NonDBX	90-140V	72x62x61	ENV56D98G3	See sticker in set							
24PT6341/37	469	L04U	RC19335004/01	N-M	BTSC	90-140V	68x47x52	TEDH9-305A								
24PW6518/01	491	L04E	RC19039001/01	P-BGDKI,S-BGDKLL'	F-BG,Mono,N-BGDKIL	220-240V	69x45x43	UV1316E/A I-4	See sticker in set							
24PW6518/05	491	L04E	RC19039001/01	P-BGDKI,S-BGDKLL'	F-BG,Mono,N-BGDKIL	220-240V	69x45x43	UV1316E/A I-4	See sticker in set							
25HT3312/93R	507	L04HA	RC19335018/01	P-BGBHDKI,N-M	2CS-BGDK,F-BG/China,N-BGDKI		90-276AutoV	UV1356A/A I G-3	See sticker in set							
25HT3317/93Y	507	L04HA	RC19335018/01	P-BGBHDKI,N-M	2CS-BGDK,F-BG/China,N-BGDKI		90-276AutoV	UV1356A/A I G-3	See sticker in set							
25HT5405/01B	525	L04E	Not applicable	P-BGDKI,S-BGDKLL'	AV S,F-BG,Mono,N-BGDKIL	220-240V	68x47x54	UV1316E/A I-4	See sticker in set							
25HT5405/01Z	525	L04HE	Not applicable	P-BGDKI,S-BGDKLL'	AV S,F-BG,Mono,N-BGDKIL	220-240V		UV1316E/A I-4	See sticker in set							
25HT5405/05B	352	L04E														
25HT5405/05Z	525	L04E	Not applicable	P-BGDKI,S-BGDKLL'	AV S,F-BG,Mono,N-BGDKIL	220-240V	68x47x54	UV1316E/A I-4	See sticker in set							
25PT3323/67R	326	L01.1A	RC19335003/01	P-BGDKI,S-BGDKK1S-BGDKK1,N-M/4.43(5.5)/4.43(6.5)/4.43	AV S	90-276AutoV	72x62x61	TEDE9-228B	0	215	193	1	236	145	28	16
25PT3323/69S	326	L01.1A	RC19042001/01	P-BGDKI,S-BGDKK1S-BGDKK1,N-M/4.43(5.5)/4.43(6.5)/4.43	AV S	90-276AutoV	72x62x61	TEDE9-228B	0	215	193	1	236	145	28	129
25PT3323/71R	326	L01.1A	RC19335003/01	N-M/4.43(5.5)/4.43	BTSC	90-276AutoV	72x62x61	TEDH9-200A	0	215	193	162	108	145	16	2
25PT3324/71R	469	L04A	RC19335003/01	P-BGDKI	AV S	90-276 AutoV	68x47x52	TEDH9-305A								
25PT4323/56S	326	L01.1A	RC19335003/01	N-M/4.43,P-BGDKI,S-BGDKK1	AV S,F-BG/China,N-BGDKI,BI NICAM BGD/2CS-BGID/2CS-DK	90-276AutoV	72x62x61	TEDE9-228B	0	215	209	170	252	145	92	4
25PT4323/67R	326	L01.1A	RC19335003/01	N, P-BGLDKI,P-BH,S-BGDKK1	AV S,BI NICAM BGDI, 2CS BGDK,F-BG/China),N-BGDKI	90-276AutoV	72x62x61	TEDE9-228B	0	215	109	170	252	145	92	16
25PT4323/69S	326	L01.1A	RC19042001/01	P-BGDKI,S-BGDKK1S-BGDKK1,N-M	AV S,F-BG,N-BGDKI,BI NICAM BGD/2CS-BGID/2CS-DK	90-276AutoV	72x62x61	TEDE9-228B	0	215	209	170	252	145	92	129
25PT4458/01	523	L04E	RC19039001/01	P-BGDKI,S-BGDKLL'	F-BG,Mono,N-BGDKIL	220-240V	68x47x54	UV1316E/A I-4	See sticker in set							
25PT4458/05	523	L04E	RC19039001/01	P-BGDKI,S-BGDKLL'	F-BG,Mono,N-BGDKIL	220-240V	68x47x54	UV1316E/A I-4	See sticker in set							
25PT4524/93R	507	L04A	RCLA015	P-BGBHDKI,N-M	2CS-BGDK,F-BG/China,N-BGDKI		150-276V	UV1356A/A I G-3	161	69	128	33	252	136	0	0
25PT5207/60S	326	L01.1A	RC19042001/01	P-BGDKI,S-BGDKK1S-BGDKK1,N-M	AV S	90-276AutoV	77x67x62	TEDE9-228B	See sticker in set							
25PT5307/60S	326	L01.1A	RC19042001/01	P-BGDKI,S-BGDKK1S-BGDKK1,N-M	F-BG,N-BGDKI,BI NICAM BGD/2CS-BGID/2CS-DK	90-276AutoV	77x67x62	TEDE9-228A	See sticker in set							
26HF9472/12	493	LC4.2E														
26PF8946/12	494	LC4.2E	RC1553801/01	P-BGDKI,S-BGDKLL'	F-BG,N-BGDKIL,BI NICAM BG/2CS-BG	AutoMulti-Voltage	79x44x12	UR1316/A I H-3	See sticker in set							
26PF9946/12	494	LC4.2E	RC1553801/01	P-BGDKI,S-BGDKLL'	F-BG,N-BGDKIL,BI NICAM BG/2CS-BG	AutoMulti-Voltage	79x44x12	UR1316/A I H-3	See sticker in set							
26PF9946/79	518	LC4.2A	RC1553802/01	P-BGDKI,S-BGDKK1S-BGDKK1,N-M/4.43(5.5)	F-Korea/BG/China,N-BGDKI,BI NICAM BGD/2CS-BG	AutoMulti-Voltage	79x51x27	UR1316/A I H-3	128	180	12	0	252	95	128	N.A.
26PF9946/98	518	LC4.2A		P-BGDKI,S-BGDKK1S-BGDKK1,N-M/4.43(5.5)	F-Korea/BG/China,N-BGDKI,BI NICAM BGD/2CS-BG		AutoMulti-Voltage									
26PF9956/12	493	LC04.2E														
26PF9956/79	518	LC4.2A	RC1553805/01	P-BGDKI,S-BGDKK1S-BGDKK1,N-M/4.43(5.5)	F-Korea/BG/China,N-BGDKI,BI NICAM BGD/2CS-BG	AutoMulti-Voltage	79x51x27	UR1316/A I H-3	128	180	12	0	252	95	128	N.A.
26PF9956/98	518	LC4.2A		P-BGDKI,S-BGDKK1S-BGDKK1,N-M/4.43(5.5)	F-Korea/BG/China,N-BGDKI,BI NICAM BGD/2CS-BG		AutoMulti-Voltage									
26PF9966/37	494	LC4.2U	RC1553803/01	N-M	B-DBX	AutoMulti-Voltage	79x44x12	UR1336/A F S H-3	See sticker in set							
28DW6559/01	491	L04E	RC19042017/01	P-BGDKI,S-BGDKLL'	F-BG,N-BGDKIL	220-240V	77x50x54	TEDE9-717A	See sticker in set							
28DW6559/05	491	L04E	RC19042017/01	P-BGDKI,S-BGDKLL'	F-BG,N-BGDKIL	220-240V	77x50x49	TEDE9-717A	See sticker in set							
28HT5404/05S	353	L01H.1E	RC86702/01	P-BGDKI,S-BGDKK1LL'	N-BGDKIL,F-BG,Mono,AV S	220-240V	73x58x46		See sticker in set							
28HT5405/01Z	524	L04HE	Not applicable	P-BGDKI,S-BGDKLL'	AV S,F-BG,Mono,N-BGDKIL	220-240V		UV1316E/A I-4	See sticker in set							
28HT5405/05Z	524	L04E	Not applicable	P-BGDKI,S-BGDKLL'	AV S,F-BG,Mono,N-BGDKIL	220-240V	77x50x54	UV1316E/A I-4	See sticker in set							
28HW6505/01Z	490	L04E	Not applicable	P-BGDKI,S-BGDKLL'	AV S,F-BG,Mono,N-BGDKIL	220-240V	77x50x49	UV1316E/A I-4	See sticker in set							
28HW6505/05Z	490	L04E	Not applicable	P-BGDKI,S-BGDKLL'	AV S,F-BG,Mono,N-BGDKIL	220-240V	77x50x49	UV1316E/A I-4	See sticker in set							
28PT4408/01	524	L04E	RC19039001/01	P-BGDKI,S-BGDKLL'	F-BG,Mono,N-BGDKIL	220-240V		UV1316E/A I-4	See sticker in set							
28PT4418/01	524	L04E	RC19039001/01	P-BGDKI,S-BGDKLL'	F-BG,Mono,N-BGDKIL	220-240V	77x50x49	UV1316E/A I-4	See sticker in set							
28PT4418/05	524	L04E	RC19039001/01	P-BGDKI, S-BDKLL1	F-BG,Mono,N-BGDKIL	220-240V	77x50x49	UV1316E/A I-4	See sticker in set							
28PT4458/01	523	L04E	RC19039001/01	P-BGDKI,S-BGDKLL'	F-BG,Mono,N-BGDKIL	220-240V	77x50x49	UV1316E/A I-4	See sticker in set							
28PT4458/05	523	L04E	RC19039001/01	P-BGDKI,S-BGDKLL'	F-BG,Mono,N-BGDKIL	220-240V	77x50x49	UV1316E/A I-4	See sticker in set							
28PT5008/01	523	L04E	RC19039001/01	P-BGDKI,S-BGDKLL'	F-BG,Mono,N-BGDKIL	220-240V	77x50x49	UV1316E/A I-4	See sticker in set							
28PT7109/12	464	A02E	RC19042011/01	P-BGDKI,S-BGDKLL'	F-BG/Czech,N-BGDKIL,BI NICAM BG/2CS-BG	220-240V	73x59x46	UV1316E/A I-4	See sticker in set							
28PT7129/12	464	A02E	RC19042011/01	P-BGDKI,S-BGDKLL'	F-BG/Czech,N-BGDKIL,BI NICAM BG/2CS-BG	220-240V	73x59x46	UV1316E/A I-4	See sticker in set							
28PT7139/12	464	A02E	RC19042011/01	P-BGDKI,S-BGDKLL'	F-BG/Czech,N-BGDKIL,BI NICAM BG/2CS-BG	220-240V	73x59x46	UV1316E/A I-4	See sticker in set							
28PT7159/12	464	A02E	RC19042011/01	P-BGDKI,S-BGDKLL'	F-BG/Czech,N-BGDKIL,BI NICAM BG/2CS-BG	220-240V	73x59x46	UV1316E/A I-4	See sticker in set							
28PW6008/01	522	L04E	RC19039001/01	P-BGDKI,S-BGDKLL'	F-BG,Mono,N-BGDKIL	220-240V	77x50x49	UV1316E/A I-4	See sticker in set							
28PW6008/05	522	L04E	RC19039001/01	P-BGDKI,S-BGDKLL'	F-BG,Mono,N-BGDKIL	220-240V	77x55x54	UV1316E/A I-4	See sticker in set							
28PW6008/58	522	L04E	RC19039001/01	P-BGDK,S-BGDK	F-BG/Czech,Mono,N-BGDKI	220-240V	77x55x54	UV1316E/A I-4	See sticker in set							
28PW6408/01	488	L04E	RC19039001/01	P-BGDKI,S-BGDKLL'	F-BG,Mono,N-BGDKIL	220-240V	79x51x51	UV1316E/A I-4	See sticker in set							
28PW6408/05	488	L04E	RC19039001/01	P-BGDKI,S-BGDKLL	F-BG,Mono,N-BGDKIL	220-240V	79x51x51	UV1316E/A I-4	See sticker in set							
28PW6518/01	491	L04E	RC19039001/01	P-BGDKI,S-BGDKLL'	F-BG,Mono,N-BGDKIL	220-240V	77x50x49	UV1316E/A I-4	See sticker in set							
28PW6518/05	491	L04E	RC19039001/01	P-BGDKI,S-BGDKLL'	F-BG,Mono,N-BGDKIL	220-240V	77x50x49	UV1316E/A I-4	See sticker in set							

Model Number Survey

MODEL	STYLING	CHASSIS	RC	SYSTEM	SOUND	SIZE	VOLTRANGE	TUNER	OPTION CODES							
				P-..=PAL S-..=SECAM N-..=NTSC	N-..=NICAM F-..=FM/FM	wxhxd (cm)			1	2	3	4	5	6	7	8
28PW6518/58	491	L04E	RC19036001/01	P-BGDKI,S-BGDKLL'	F-BG,Mono,N-BGDKIL	220-240V	77x50x49	UV1316E/A I-4	See sticker in set							
28PW6558/01	491	L04E	RC4332/01	P-BGDKI,S-BGDKLL'	F-BG,Mono,N-BGDKIL	220-240V	77x50x49		See sticker in set							
28PW6618/01	490	L04E	RC4332/01	P-BGDKI,S-BGDKLL'	F-BG,Mono,N-BGDKIL	220-240V	77x50x49	TEDE9-717A	See sticker in set							
28PW6618/05	490	L04E	RC4332/01	P-BGDKI,S-BGDKLL'	F-BG,Mono,N-BGDKIL	220-240V	77x50x49	UV1316E/A I-4	See sticker in set							
28PW6618/58	490	L04E	RC4332/01	P-BGDKI,S-BGDKLL'	F-BG,Mono,N-BGDKIL	220V	77x50x49	UV1316E/A I-4	See sticker in set							
28PW8609/12S	439	A02E	RC19042011/01	P-BGDKI,S-BGDKLL'	F-BG/Czech,N-BGDKIL,BI NICAM BG/2CS-BG	220-240V	79x51x51	UV1317/A I X U-3	See sticker in set							
28PW8620/12	542	A02E														
28PW8719/05	460	A02E	RC4330/01	P-BGDKI,S-BGDKLL'	F-BG/Czech,N-BGDKIL,BI NICAM BG/2CS-BG	220-240V	79x51x51	UV1317/A I X U-3	See sticker in set							
28PW8719/12	460	A02E	RC4330/01	P-BGDKI,S-BGDKLL'	F-BG/Czech,N-BGDKIL,BI NICAM BG/2CS-BG	220-240V	79x51x51	UV1317/A I X U-3	See sticker in set							
28PW8720/12	544	A02E														
28PW9308/05	404	EM5E	RC2080	P-BGDKI,S-BGDKLL'	N-BGDKIL,F-BG/Czech	220-240V	80x52x52	UV1318S/A I-3	See sticker in set							
28PW9308/12	404	EM5E	RC2080	P-BGDKI,S-BGDKLL'	N-BGDKIL,F-BG/Czech	220-240V	80x52x52	UV1318S/A I-3	See sticker in set							
28PW9309/05	456	EM5.2E	RC4337/01B	P-BGDKI,S-BGDKLL'	F-BG/Czech,N-BGDKIL	220-240V	80x51x50	UV1318S/A I-3	See sticker in set							
28PW9309/12	456	EM5.2E	RC4337/01B	P-BGDKI,S-BGDKLL'	F-BG/Czech,N-BGDKIL	220-240V	80x51x50	UV1318S/A I-3	See sticker in set							
28PW9509/05	456	EM5.3E	RC4301/01	P-BGDKI,S-BGDKLL'	F-BG/Czech,N-BGDKIL	220-240V	77x50x49	UV1318S/A I-3	See sticker in set							
28PW9509/12	456	EM5.3E	RC4301/01	P-BGDKI,S-BGDKLL'	F-BG/Czech,N-BGDKIL	220-240V	76x50x49	UV1318S/A I-3	See sticker in set							
29HT2212/93R	329	L01H.1A	RC2882/01	P-BGBHDKI,S-BGDKK1S-BGDKK1,N-M/3.58(5.5)/3.58(6.0)/3.58(6.5	AV S,N-DK,BI NICAM BGD/2CS-BGI/2CS-DKID/2CS-DK		150-276V	TEDE9-228B	25	20	178	41	2	113	0	
29HT3312/93R	507	L04HA	RC19335018/01	P-BGBHDKI,N-M	2CS-BGDK,F-BG/China,N-BGDKI		90-276AutoV	UV1356A/A I G-3	See sticker in set							
29HT3317/93Y	507	L04HA	RC19335018/01	P-BGBHDKI,N-M	2CS-BGDK,F-BG/China,N-BGDKI		90-276AutoV	UV1356A/A I G-3	See sticker in set							
29PT2162/67R	393	L01.1A	RC19335003/01	P-BGBHDKI,S-BGDKK1,N-M/4.43	AV S,F-BG/China,BI NICAM BGD/2CS-BGID/2CS-DK,N-BGDKI	90-276AutoV	76x59x51	TEDE9-228B	See sticker in set							
29PT2162/68R	393	L01.1A	RC19042001/01	P-BGDKI,S-BGDKK1S-BGDKK1,N-M	AV S,F-BG,N-BGD,BI NICAM BGD/2CS-BGID/2CS-DK	90-276AutoV	76x59x51	TEDE9-228B	See sticker in set							
29PT3143/93R	458	TC3.2A	06-0R1735-H009X	P-DK,N-M/4.43/P-60	AV S	180-276V		UV1355C/A I B-3	Not applicable							
29PT3223/56R	328	L01.1A	RC19335003/01	P-BGDKI,S-BGDKK1S-BGDKK1,N-M	AV S	90-276AutoV	76x59x51	TEDE9-228B	0	215	193	1	236	145	28	4
29PT3223/67R	328	L01.1A	RC19335003/01	N-M/4.43,P-BGBHDKI,S-BGDKK1	AV S	90-276AutoV	76x59x51	TEDE9-228B	0	215	193	1	236	145	28	16
29PT3223/69S	328	L01.1A	RC19042001/01	P-BGDKI,S-BGDKK1S-BGDKK1,N-M	AV S	90-276AutoV	76x59x51	TEDE9-228B	0	215	193	1	236	145	28	129
29PT3223/71R	328	L01.1A	RC19335003/01	N-M	BTSC	90-276AutoV		TEDH9-200A	0	215	193	162	108	145	16	2
29PT3224/56R	469	L04A	RCLA014	P-BGBHDKI,N-M	AV S	90-276AutoV	76x59x51	UV1356A/A I G-3	160	5	128	32	252	136		
29PT3224/67R	312	L04A	RC19335003/01	P-BGDKI	AV S	90-276AutoV	76x59x51	UV1356A/A I G-3	See sticker in set							
29PT3224/69S	469	L04A	RC19042001/01	P-BGBHDKI,N-M	AV S	90-276AutoV	76x59x51	U1356A/A I G-3	See sticker in set							
29PT3224/71R	312	L04A	RC19335003/01	N-M	AV S	90-276AutoV	76x59x51	TEDH9-305A	See sticker in set							
29PT3224/93R	469	L04A	RCLA015	P-BGBHDKI,N-M	AV S		150-276V	UV1356A/A I G-3	161	69	128	32	252	136	0	0
29PT3225/93	469	L04A		NTSC M (3.58 - 4.5), PAL B/G, PAL B/H, PAL D/K, PAL I	AV Stereo		90-276V	UV1356A/A I G-3	161	69	128	33	252	152	0	0
29PT3323/67R	328	L01.1A	RC19335003/01	N-M/4.43,P-BGBHDKI,S-BGDKK1	AV S,BI NICAM BGDID - 2CS BGDK, F-BG/China,N-BGDKI	90-276 AutoV	76x59x51	TEDE9-228B	0	215	193	170	252	145	28	16
29PT3323/69S	328	L01.1A	RC19042001/01	P-BGDKI,S-BGDKK1S-BGDKK1,N-M	AV S,F-BG,N-BGDKI,BI NICAM BGD/2CS-BGID/2CS-DK	90-276AutoV	76x59x51	TEDE9-228B	0	215	193	170	252	145	28	129
29PT3324/69R	328	L04A	RC19042001/01	P-BGBHDKI,N-M	2CS-BGDK,F-BG/China,N-BGDKI	90-276AutoV	76x59x51	UV1356A/A I G-3	See sticker in set							
29PT3324/79R	328	L04A	RC19042001/01	P-BGBHDKI	2CS-BGDK,F-BG/China,N-BGDKI	150-276V	76x59x51	UV1356A/A I G-3	See sticker in set							
29PT3324/93R	539	L04A	RCLA015	P-BGBHDKI,N-M	N-BGDKI		150-276V	UV1356A/A I G-3	161	69	128	33	252	152	0	0
29PT4323/69S	432	L01.1A	RC19042001/01	P-BGDKI,S-BGDKK1S-BGDKK1,N-M	AV S,F-BG,N-BGDKI,BI NICAM BGD/2CS-BGID/2CS-DK	90-276AutoV	76x59x51	TEDE9-228B	0	215	209	170	252	145	92	129
29PT4324/93R	469	L04A	RCLA015	P-BGBHDKI,N-M	N-BGDKI		150-276V	UV1356A/A I G-3	161	69	128	33	252	152	0	0
29PT4325/69	432	L01.1A														
29PT4326/69	432	L01.1A														
29PT5107/60S	328	L01.1A	RCLA014	P-BGDKI,S-BGDKK1S-BGDKK1,N-M	AV S	90-276AutoV	86x73x63	TEDE9-228B	See sticker in set							
29PT5207/60S	328	L01.1A	RC19042001/01	P-BGDKI,S-BGDKK1S-BGDKK1,N-M	AV S	90-276AutoV	90x76x67	TEDE9-228B	See sticker in set							
29PT5217/60S	328	L01.1A	RCLA014	P-BGDKI,S-BGDKK1S-BGDKK1,N-M	F-BG,N-BGDKI,BI NICAM BGD/2CS-BGID/2CS-DK	90-276AutoV	90x76x67	TEDE9-228B	See sticker in set							
29PT5307/60S	432	L01.1A	RC19042001/01	P-BGDKI,S-BGDKK1S-BGDKK1,N-M	F-BG,N-BGDKI,BI NICAM BGD/2CS-BGID/2CS-DK	90-276AutoV	90x76x67	TEDE9-228B	See sticker in set							
29PT5308/60	554	L01.2E														
29PT5407/21	465	L01.2A	RC19039001/01	P-BGDKI,S-BGDKLL'	F-BG,Mono,N-BGDKIL	220-240V	90x76x67	UV1317/A I G-3	See sticker in set							
29PT5458/01	489	L04E	RC19039001/01	P-BGDKI,S-BGDKLL'	F-BG,Mono,N-BGDKIL	220-240V	90x76x67	UV1316E/A I-4	See sticker in set							
29PT5509/01	491	L04E	RC19039001/01	P-BGDKI,S-BGDKLL'	F-BG,Mono,N-BGDKIL	220-240V	90x76x67	UV1316E/A I-4	See sticker in set							
29PT5518/01	491	L04E	RC19039001/01	P-BGDKI,S-BGDKLL'	F-BG,Mono,N-BGDKIL	220-240V	90x76x67	UV1316E/A I-4	See sticker in set							
29PT5518/58	491	L04E	RC19039001/01	P-BGDK,S-BGDK	F-BG/Czech,Mono,N-BGDKI	220-240V	90x76x67	UV1316E/A I-4	See sticker in set							
29PT5618/01	490	L04E	RC4332/01	P-BGDKI,S-BGDKLL'	F-BG,Mono,N-BGDKIL	220-240V	75x58x50	UV1316E/A I-4	See sticker in set							
29PT5618/58	490	L04HE	RC4332/01	P-BGDK,S-BGDK	F-BG/Czech,Mono,N-BGDKI	220-240V	90x76x67	TEDE9-717A	See sticker in set							
29PT7322/56R	535	EM1.1A														
29PT7322/69R	520	EM1.1A	RC19042001/01	N-M, P-BG, S-BG	F-Korea/BG/China,N-BGDKI,BI NICAM BGD/2CS-BG	90-276AutoV	75x58x50	TEDE9-200A	123	103	255	204	128	0	0	0
29PT7322/79R	535	EM1.1A														
29PT7333/93R	507	L04A	RCLA015	P-DKI	2CS-BGDK,F-BG/China,N-BGDKI	150-276 V	80x73x59	UV1356A/A I G-3	185	141	128	33	252	136	0	0
29PT8322/69R	535	EM1.1A														
29PT8322/93R	535	EM1.1A														
29PT8609/12	461	A02E	RC19042002/01	P-BGDKI,S-BGDKLL'	F-BG/Czech,N-BGDKIL,BI NICAM BG/2CS-BG	220-240V	90x76x67	UV1317/A I X U-3	See sticker in set							
29PT8639/12	531	A02E	RC4330/01H	P-BGDKI,S-BGDKLL'	F-BG/Czech,N-BGDKIL,BI NICAM BG/2CS-BG	220-240V	75x58x50		See sticker in set							
29PT8659/12	531	A02E	RC4330/01H	P-BGDKI,S-BGDKLL'	F-BG/Czech,N-BGDKIL,BI NICAM BG/2CS-BG	220-240V	75x58x50	UV1316E/A I-4	See sticker in set							
29PT9022/93R	535	EM1.1A														
29PT9421/56R	534	EM5.3A	RC4302	P-BGBG60HzDKIM,S-BGDKS-BGDK,N-M	F-BG,N-BGDKI		AutoMulti-Voltage									
29PT9421/69R	534	EM5.3A	RC4302	P-BGBG60HzDKIM,S-BGDKS-BGDK,N-M	F-BG,N-BGDKI		220-240V									
30FW9955/35	429	FTL13U	RC4305/01	N-M	B-DBX	110V	89x49x11	TEDH9-200A	See sticker in set							
30FW9975/35	429	FTL13U	RC4305/01	N-M	B-DBX	110V	89x49x11	TEDH9-200A	See sticker in set							
30HF9442/12	505	LC4.6E	RC19335018/01		F-BG,N-BGDKIL,BI NICAM BG/2CS-BG		AutoMulti-Voltage									
30HF9975/69	429	FTL13E	RC4301/01	P-BGDKI,S-BGDKLL'	AV S,BI NICAM BG/2CS-BGBGD/2CS-BG	198-264V	89x49x11	UV1318S/A I-3	See sticker in set							
30MF200V/17	504	LC4.6	RC4341/01B		AV S	100-250V	90x49x11	UV1338/A F S H-4	See sticker in set							
30PF9946/12	504	LC4.6E	RC4333/01	P-BGDKI,S-BGDKLL	F-BG,N-BGDKIL,BI NICAM BG/2CS-BG	AutoMulti-Voltage	90x49x11	UV1318S/A IH-3	See sticker in set							
30PF9946/61	504	LC4.6A	RC4333/01	N-M/4.43(5.5)	F-Korea/BG/China,N-BGDKI,BI NICAM BGD/2CS-BG	AutoMulti-Voltage	90x49x11	TEDH9-200A	See sticker in set							

Model Number Survey

MODEL	STYLING	CHASSIS	RC	SYSTEM	SOUND	SIZE	VOLTRANGE	TUNER	OPTION CODES 1	2	3	4	5	6	7	8
				P-..=PAL S-..=SECAM N-..=NTSC	N-..=NICAM F-..=FM/FM	wxhxd (cm)										
30PF9946/79	504	LC4.6	RC4335/01		F-Korea/BG/China,N-BGDKI,BI NICAM BGD/2CS-BG	AutoMulti-Voltage	90x49x11	UV1318S/A IH-3	See sticker in set							
30PF9946/93	504	LC4.6A	RCAA049_FRP		F-Korea/BG/China,N-BGDKI,BI NICAM BGD/2CS-BG		AutoMulti-Voltage									
30PF9946/98	504	LC4.6A	RC4335/01		F-Korea/BG/China,N-BGDKI,BI NICAM BGD/2CS-BG	AutoMulti-Voltage	90x49x11	UV1318S/A IH-3	See sticker in set							
30PF9946D/37	504	LC4.6U	RC4334/01		B-DBX	AutoMulti-Voltage	90x49x11	UV1338/A F S H-4	See sticker in set							
30PF9946D/78	504	LC4.6	RC4334/01		AV S, B-DBX	100-250V	90x49x11	UV1338/A F S H-4	See sticker in set							
30PF9975/12A	429	FTL13E	RC4301/01	P-BGDKI,S-BGDKLL'	2CS-BG,NICAM-BGDK	198-264V	89x49x11	UV1318S/A I-3	See sticker in set							
30PF9975/77	429	FTL13E	RC4305/01	P-BGDKIMN,S-BGDKLL'	2CS-BG,NICAM-BGDK	198-264V	89x49x11	TEDH9-200A	See sticker in set							
30PF9975/78	429	FTL13E	RC4305/01	P-BGDKIMN,S-BGDKLL'	2CS-BG,NICAM-BGDK	100-110V	89x49x11	TEDH9-200A	See sticker in set							
32DW6559/01	491	L04E	RC19042017/01	P-BGDKI,S-BGDKLL'	F-BG,N-BGDKIL	220-240V	86x55x54	TEDE9X717A	See sticker in set							
32DW6559/05	491	L04E	RC19042017/01	P-BGDKI,S-BGDKLL'	F-BG,N-BGDKIL	220-240V	86x55x54	TEDE9-717A	See sticker in set							
32PF9956/12	500	FTL3.1E	RC4304/01B	P-BGDKI,S-BGDKLL'	F-BG,N-BGDKI	220-240V	86x61x11	UV1318S/A I H N-3	See sticker in set							
32PF9966/37	498	FTL2.2U	RC4307/01B				100-110V	TEDH9-705A								
32PF9966/61	498	FTL2.2A	RC4307/01B				100-250V									
32PF9966/69	498	FTL2.2A					100-250V									
32PF9966/79	498	FTL2.2A					100-250V									
32PF9966/93	498	FTL2.2A	RC4302/01				100-250V									
32PF9966/98	498	FTL2.2A					100-250V									
32PF9986/12	499	FTL2.1E	RC4302/01	P-BGDKI,S-BGDKLL	AV S,F-BG,N-BGDKI	220-240V	100x60x10	UV1318ST/AIH-3	See sticker in set							
32PF9996/37	500	FTL2.1U	RC4307/01B	N-M	AV S, BTSC	100-250V	100x60x10	TEDH9-705A	See sticker in set							
32PF9996/78	499	FTL2.1L	RC4307/01B				90-260V	TEDH9-705A								
32PW4523/79R	457	L01.1A	RC19042001/01	P-BGBHDKI,S-BGDKK1S-BGDKK1,N-M	AV S,F-BG,N-BGDKI,BI NICAM BGD/2CS-BGID/2CS-DK	150-276V	85x55x54	TEDE9-228B	0	223	149	170	252	145	92	1
32PW6408/01	488	L04E	RC19039001/01	P-BGDKI,S-BGDKLL'	F-BG,Mono,N-BGDKIL	220-240V	89x57x54	UV1316E/A I-4	See sticker in set							
32PW6408/05	488	L04E	RC19039001/01	P-BGDKI,S-BGDKLL	F-BG,Mono,N-BGDKIL	220-240V	89x57x54	UV1316E/A I-4	See sticker in set							
32PW6518/01	491	L04E	RC19039001/01	P-BGDKI,S-BGDKLL'	F-BG,Mono,N-BGDKIL	220-240V	89x57x54	UV1316E/A I-4	See sticker in set							
32PW6518/05	491	L04E	RC19039001/01	P-BGDKI,S-BGDKLL'	F-BG,Mono,N-BGDKIL	220-240V	89x57x54	UV1316E/A I-4	See sticker in set							
32PW6518/58	491	L04E	RC19039001/01	P-BGDKI, S-BDKLL1	F-BG, Mono, NICAM BGDKIL	220V	86x55x54	UV1316E/A I-4	See sticker in set							
32PW6618/01	490	L04E	RC4332/01	P-BGDKI,S-BGDKLL'	F-BG,Mono,N-BGDKIL	220-240V	86x52x54	UV1316E/A I-4	See sticker in set							
32PW6618/05	490	L04E	RC4332/01	P-BGDKI,S-BGDKLL'	F-BG,Mono,N-BGDKIL	220-240V	86x55x54	UV1316E/A I-4	See sticker in set							
32PW8609/12S	439	A02E	RC19042011/01	P-BGDKI,S-BGDKLL'	F-BG/Czech,N-BGDKIL,BI NICAM BG/2CS-BG	220-240V	77x49x51	UV1316E/A I-4	See sticker in set							
32PW8620/12	542	A02E														
32PW8717/05	305	EM2E	RC19042002/01	P-BGDKI,S-BGDKLL'	N-BGDKIL,F-BG/Czech	220-240V	85x55x56	UV1316/A I X U-3	See sticker in set							
32PW8719/05	463	A02E	RC4330/01H	P-BGDKI,S-BGDKLL'	F-BG/Czech,N-BGDKIL,BI NICAM BG/2CS-BG	220-240V	85x55x56	UV1317/A I X U-3	See sticker in set							
32PW8719/12	487	A02E	RC4330/01	P-BGDKI,S-BGDKLL'	F-BG/Czech,N-BGDKIL,BI NICAM BG/2CS-BG	220-240V	85x55x56	UV1316E/A I-4	See sticker in set							
32PW8720/12	544	A02E														
32PW8729/05	531	A02E	RC4330/01H	P-BGDKI,S-BGDKLL'	F-BG/Czech,N-BGDKIL,BI NICAM BG/2CS-BG	220-240V	86x55x54		See sticker in set							
32PW8739/12	531	A02E	RC4330/01H	P-BGDKI,S-BGDKLL'	F-BG/Czech,N-BGDKIL,BI NICAM BG/2CS-BG	220-240V	86x55x54		See sticker in set							
32PW8759/05	531	A02E	RC4330/01H	P-BGDKI,S-BGDKLL'	F-BG/Czech,N-BGDKIL,BI NICAM BG/2CS-BG	220-240V	86x55x54		See sticker in set							
32PW8759/12	531	A02E	RC4330/01H	P-BGDKI,S-BGDKLL'	F-BG/Czech,N-BGDKIL,BI NICAM BG/2CS-BG	220-240V	86x55x54		See sticker in set							
32PW8819/12	531	A02E	RC4330/01H	P-BGDKI,S-BGDKLL'	F-BG/Czech,N-BGDKIL,BI NICAM BG/2CS-BG	220-240V	86x55x54	UV1316E/A I-4	See sticker in set							
32PW9309/05	456	EM5.2E	RC4337/01B	P-BGDKI,S-BGDKLL'	F-BG/Czech,N-BGDKIL	220-240V	84x55x54	UV1318S/A I-3	See sticker in set							
32PW9309/12	456	EM5.2E	RC4337/01B	P-BGDKI,S-BGDKLL'	F-BG/Czech,N-BGDKIL	220-240V	84x55x54	UV1318S/A I-3	See sticker in set							
32PW9319/12	456	EM5.2E	RC2080	P-BGDKI,S-BGDKLL'	F-BG/Czech,N-BGDKIL	220-240V	84x55x54	UV1318S/A I U-3	See sticker in set							
32PW9509/05	456	EM5.3E	RC4301/01	P-BGDKI,S-BGDKLL'	F-BG/Czech,N-BGDKIL	220-240V	86x56x68	UV1318S/A I-3	See sticker in set							
32PW9509/12	456	EM5.3E	RC4301/01	P-BGDKI,S-BGDKLL'	F-BG/Czech,N-BGDKIL	220-240V	86x68x68	UV1318S/A I-3	See sticker in set							
32PW9768/05	406	EM5E	RC2044/01	P-BGDKI,S-BGDKLL'	N-BGDKIL,F-BG/Czech	220-240V	85x55x54		See sticker in set							
32PW9768/12	406	EM6E	RC4301/01	P-BGDKI,S-BGDKLL'	N-BGDKIL,F-BG/Czech	220-240V	85x55x54	UV1318S/A I-3	See sticker in set							
34HT3312/93R	537	L04HA	RC19335018/01	P-BGBHDKI,N-M	2CS-BGDK,F-BG/China,N-BGDKI		150-276V	UV1356A/A I G-3								
34PT3224/93R	536	L04A	RCLA015	P-BGBHDKI,N-M	2CS-BGDK,F-BG/China,N-BGDKI		150-276V	UV1356A/A I G-3	161	69	128	33	252	152	0	0
34PT3225/93	536	L04A	RC19335003/01	NTSC M (3.58 - 4.5), PAL B/G, PAL B/H, PAL D/K, PAL I	2CS BG, 2CS D/K, FM/FM (5.5-5.74) (B/G), FM/FM (6.5-6.74) (China), NICAM B/G (5.5-5.85)		150 - 276 V	UV1356A/A I G-3	161	69	128	33	252	152	0	0
34PT4524/93R	537	L04A	RCLA015	P-BGBHDKI,N-M	2CS-BGDK,F-BG/China,N-BGDKI		150-276V	UV1356A/A I G-3	161	21	128	33	252	152	0	0
34PT7333/93R	507	L04A	RC19335003/01	P-DKI	2CS-BGDK,F-BG/China,N-BGDKI	150-276V	96x83x67	UV1356A/A I G-3	185	141	128	33	252	136	0	0
34PT8322/69R	520	EM1.1A	RC19042001/01	N-M, P-BG, S-BG	F-Korea/BG/China,N-BGDKI,BI NICAM BGD/2CS-BG	90-276AutoV	88x68x56	TEDE9-200A	123	119	255	204	128	0	0	0
34PT8322/93R	535	EM1.1A			F-Korea/BG/China,N-BGDKI,BI NICAM BGD/2CS-BG		160-276V									
34PT9022/93R	535	EM1.1A														
34PT9420/93R	382	EM5A	RC2049/01B	P-BGDKIM,S-BGDK,N-M	N-BGDK,2SC-DK	AutoMulti-Voltage	89x69x56	TEDE9X701A	See sticker in set							
34PT9421/56R	534	EM5.3A	RC4302	P-BGBG60HzDKIM,S-BGDKS-BGDK,N-M	F-BG,N-BGDKI		AutoMulti-Voltage									
34PT9421/69R	534	EM5.3A	RC4302	P-BGBG60HzDKIM,S-BGDKS-BGDK,N-M	F-BG,N-BGDKI		AutoMulti-Voltage									
34PT9421/69R	534	EM5.3A	RC4302	P-BGBG60HzDKIM,S-BGDKS-BGDK,N-M	F-BG,N-BGDKI		220-240V									
36PW8719/05	487	A02E	RC4330/01	P-BGDKI,S-BGDKLL'	F-BG/Czech,N-BGDKIL,BI NICAM BG/2CS-BG	220-240V	101x59x64	UV1316E/A I-4	See sticker in set							
36PW8719/12	487	A02E	RC4330/01	P-BGDKI,S-BGDKLL'	F-BG/Czech,N-BGDKIL,BI NICAM BG/2CS-BG	220-240V	101x59x64	UV1316E/A I-4	See sticker in set							
36PW9308/05	404	EM5E	RC2080/01	P-BGDKI,S-BGDKLL'	N-BGDKIL,F-BG/Czech	220-240V	89x57x54	UV1318S/A I-3	See sticker in set							
36PW9818/77	380	EM5L	RC2060/01B	P-MN,N-M	B-DBX	AutoMulti-Voltage	95x61x58	TEDH9X700A	See sticker in set							
37PF9936/37	505	LC4.7	RC4334/01		B-DBX	AutoMulti-Voltage	113x60x9	UV1338/A F S H-4	See sticker in set							
37PF9946/12	505	LC4.7	RC4333/01		F-BG,N-BGDKIL,BI NICAM BG/2CS-BG	AutoMulti-Voltage	113x60x9	UV1318S/A IH-3	See sticker in set							
37PF9946D/10	505	LC4.7E					AutoMulti-Voltage									
37PF9986/12	499	FTL2.1E	RC4302/01	P-BGDKI,S-BGDKLL	AV S,F-BG,N-BGDKI	198-264V	113x68x10	UV1318ST/AIH-3	See sticker in set							
37TA1437/16	403	TE1.1E	RC1123507/00	P-BGDKI,S-BGDKLL'	Mono	220-240V		CTT5020E/CFT5510	See sticker in set							
42FD9954/69C	335	FM24A	RC19335009/01	n/a-(Monitor)	AV-S		95-264AutoV	Not applicable	See sticker in set							
42HF9442/12	505	LC4.6E	RC19335018/01		AV S,F-BG,N-BGDKIL		AutoMulti-Voltage									
42HF9442/98	505	LC4.7A					100-250V									
42PF9936D/37	505	LC4.7	RC4334/01		B-DBX	AutoMulti-Voltage	112x66x9	UV1338/A F S H-4	See sticker in set							
42PF9936D/78	505	LC4.6L	RC4334/01				AutoMulti-Voltage	UV1338/A F S H-4								

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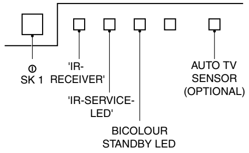
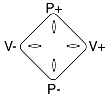
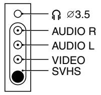
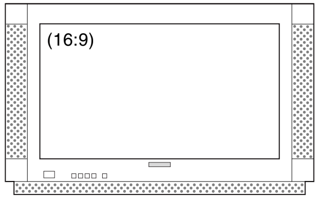
MODEL	STYLING	CHASSIS	RC	SYSTEM	SOUND	SIZE	VOLTRANGE	TUNER	OPTION CODES							
				P-..=PAL S-..=SECAM N-..=NTSC	N-..=NICAM F-..=FM/FM	wxhxd (cm)			1	2	3	4	5	6	7	8
42PF9945/69	335	FM242A	RC2080	P-BGDKI,S-BGDKLL'	AV S,BI NICAM BG/2CS-BGBGD/2CS-BG		95-264AutoV									
42PF9946/12	505	LC4.7	RC4333/01		F-BG,N-BGDKIL,BI NICAM BG/2CS-BG	AutoMulti-Voltage	112x66x9	UV1318S/A IH-3	See sticker in set							
42PF9946/79	505	LC4.7	RC4335/01		F-Korea/BG/China,N-BGDKI,BI NICAM BGD/2CS-BG	AutoMulti-Voltage	112x66x9	UV1318S/A IH-3	See sticker in set							
42PF9946/93	505	LC4.7	RC4335/01		F-Korea/BG/China,N-BGDKI,BI NICAM BGD/2CS-BG	AutoMulti-Voltage	112x66x9	TEDE9-286A	See sticker in set							
42PF9946/98	505	LC4.7	RC4335/01		F-Korea/BG/China,N-BGDKI,BI NICAM BGD/2CS-BG	AutoMulti-Voltage	112x66x9	UV1318S/A IH-3	See sticker in set							
42PF9956/12	496	FTP2.2E	RC4302/01	P-BGDKI,S-BGDKLL	AV S,F-BG,N-BGDKI	100-250V	111x88x10	UV1318S/A IH-3	See sticker in set							
42PF9956/93	496	FTP2.2A	RC4302/01	P-BGDKI,S-BGDKK1S-BGDKK1,N-M/4.43(5.5)	F-Korea/BG/China,N-BGDKI,BI NICAM BGD/2CS-BG	100-250V	111x88x10	TEDE9-286A	See sticker in set							
42PF9966/12	496	FTP2.2E	RC4302/01	P-BGDKI,S-BGDKLL	AV S,F-BG,N-BGDKI	220-240V	111x88x10	UV1318S/A IH-3	See sticker in set							
42PF9966/37	496	FTP2.2U	RC4307/01B	N-M	BTSC, F-BG,N-BGDKI	220-240V	111x88x10	TEDH9-705A	See sticker in set							
42PF9966/93	496	FTP2.2A	RC4302/01				100-250V									
42PF9966/98	496	FTP2.2A	RC4302/01	N-M, PAL BGDKI, SECAM BGDK, S-LL1	AV S, FM/FM (5.5-5.74) (B/G), N-BGDKI	100-250V	111x88x10		See sticker in set							
42PF9976/37	496	FTL2.2U	RC4307/01B					TEDH9-257A								
42PF9986/12	499	FTL2.1E					140-276V									
42PF9986/93	496	FTL2.1A	RC4302/01													
43PP8421/57	400	DPTV325	SBHV00030A	N-M/4.43(5.5), P-BGDKI, S-BGDKK1	BI NICAM BGD/2CS-BG, F-Korea/BG/China, N-BGDKI	90-276 AutoV	38x45x21	TEDE9-031A	See sticker in set							
43PP8421/69	400	DPTV325	RCS82D	P-BGDKI,S-BGDKK1,N-M/4.43	F-Korea/BG/China,N-BGDKI,BI NICAM BGD/2CS-BG	90-276AutoV		TEDE9-031A	See sticker in set							
43PP8421/79	400	DPTV325	RCS82D	P-BGDKI,S-BGDKK1,N-M/4.43	F-Korea/BG/China,N-BGDKI,BI NICAM BGD/2CS-BG	90-276AutoV		TEDE9-031A	See sticker in set							
43PP8441/93	447	DPTV355	SBHV00030A	P-BGDKI,S-BGDKK1,N-M/4.43	F-Korea/BG/China,N-BGDKIL,BI NICAM BGD/2CS-BG	160-276V		TEDE9-201A	See sticker in set							
43PP8442/93	447	DPTV355	SBHV00030A	P-BGDKI,S-BGDKK1,N-M/4.43	F-Korea/BG/China,N-BGDKIL,BI NICAM BGD/2CS-BG	160-276V		TEDE9-201A	See sticker in set							
43PP8443/93	447	DPTV355	SBHV00030A	P-BGDKI,S-BGDKK1,N-M/4.43	F-Korea/BG/China,N-BGDKIL,BI NICAM BGD/2CS-BG	160-276V		TEDE9-201A	See sticker in set							
43PP8445/93	540	DPTV465	SBHV00030A	P-BGDKI,S-BGDKK1S-BGDKK1,N-M/4.43(5.5)	F-Korea/BG/China,N-BGDKIL,BI NICAM BGD/2CS-BG	96x115x53	160-276V	UV1356E/A	58	190	7	198	147	128	0	0
43PP8446/93	540	DPTV465	SBHV00030A	P-BGDKI,S-BGDKK1S-BGDKK1,N-M/4.43(5.5)	F-Korea/BG/China,N-BGDKIL,BI NICAM BGD/2CS-BG	96x115x53	160-276V	UV1357E/A	58	190	7	198	147	128	0	0
43PP8447/93	540	DPTV465	SBHV00030A	P-BGDKI,S-BGDKK1S-BGDKK1,N-M/4.43(5.5)	F-Korea/BG/China,N-BGDKIL,BI NICAM BGD/2CS-BG	96x115x53	160-276V	UV1358E/A	58	190	7	198	147	128	0	0
43PP8541/93	447	DPTV355	SBHV00030A	P-BGDKI,S-BGDKK1,N-M/4.43	F-Korea/BG/China,N-BGDKIL,BI NICAM BGD/2CS-BG	160-276V		TEDE9-201A	See sticker in set							
43PP8545/69	400	DPTV465	SBHV00030A	N-M/4.43(5.5), P-BGDKI, S-BGDKK1	BI NICAM BGD/2CS-BG, F-Korea/BG/China, N-BGDKI	90-276 AutoV	38x45x21	TEDE9-200A	115	219	194	111	53	220	0	0
46PP8621/61	400	DPTV325	SBHV00032A	N-M	F-Korea	90-276AutoV		TEDH9-202A	See sticker in set							
46PP8741/93	447	DPTV355	SBHV00030A	P-BGDKI,S-BGDKK1,N-M/4.43	F-Korea/BG/China,N-BGDKIL,BI NICAM BGD/2CS-BG	160-276V		TEDE9-201A	See sticker in set							
46PP8745/93	541	DPTV465	SBHV00030A	P-BGDKI,S-BGDKK1S-BGDKK1,N-M/4.43(5.5)	F-Korea/BG/China,N-BGDKIL,BI NICAM BGD/2CS-BG	113x134x60	160-276V	UV1358E/A	58	190	7	230	187	128	0	0
46PP9527/61	447	DPTV355	RC2060/01B	N-M/4.43(5.5)	B-DBX,F-Korea	90-276AutoV		TEDH9-202A	See sticker in set							
46PP9527/69	447	DPTV355	RC2049/01B	P-BGDKI,S-BGDKK1,N-M/4.43	F-Korea/BG/China,N-BGDKI,BI NICAM BGD/2CS-BG	90-276AutoV		TEDE9-031A	See sticker in set							
46PP9527/79	447	DPTV355	RC2049/01B	P-BGDKI,S-BGDKK1,N-M/4.43	F-Korea/BG/China,N-BGDKI,BI NICAM BGD/2CS-BG	90-276AutoV		TEDE9-031A	See sticker in set							
46PP9527/93	447	DPTV355	RC2049/01B	P-BGDKI,S-BGDKK1,N-M/4.43	F-Korea/BG/China,N-BGDKIL,BI NICAM BGD/2CS-BG	160-276V		TEDE9X029A	See sticker in set							
46PP9541/93	447	DPTV355	RC2049/01B	P-BGDKI,S-BGDKK1,N-M/4.43	F-Korea/BG/China,N-BGDKIL,BI NICAM BGD/2CS-BG	160-276V		TEDE9X029A	See sticker in set							
46PP9545/69	447	DPTV475	RC2049/01B	N-M/4.43(5.5), P-BGDKI, S-BGDKK1	BI NICAM BGD/2CS-BG, F-Korea/BG/China, N-BGDKI	90-276 AutoV	45x53x24	TEDE9-031A	See sticker in set							
46PP9545/93	541	DPTV475	RC2049/01B	P-BGDKI,S-BGDKK1S-BGDKK1,N-M/4.43(5.5)	F-Korea/BG/China,N-BGDKIL,BI NICAM BGD/2CS-BG	113x134x60	160-276V	TEDE9X029A	58	190	7	230	187	128	0	0
50PF9956/37	496	FTP2.2U	RC4306/01B	N-M	BTSC, F-BG,N-BGDKI	110-220		UV1338A T S H-4	See sticker in set							
50PF9966/12	496	FTP2.2E	RC4302/01	P-BGDKI,S-BGDKLL	AV S,F-BG,N-BGDKI	100-250V	128x88x10	UV1318S/A IH-3	See sticker in set							
50PF9966/69	496	FTP2.2A	RC4302/01				100-250V	TEDH9-705A								
50PF9966/78	496	FTP2.2L	RC4307/01B				100-250V	TEDH9-705A								
50PF9966/93	496	FTP2.2A	RC4302/01				100-250V									
50PP8421/69	401	DPTV325	SBHV00030A	P-BGDKI,S-BGDKK1S-BGDKK1,N-M/4.43(5.5)	F-Korea/BG/China,N-BGDKI,BI NICAM BGD/2CS-BG	90-276AutoV		TEDE9-031A	See sticker in set							
50PP8421/93	401	DPTV325	SBHV00030A	P-BGDKI,S-BGDKK1S-BGDKK1,N-M/4.43(5.5)	F-Korea/BG/China,N-BGDKIL,BI NICAM BGD/2CS-BG	160-276V		TEDE9X029A	See sticker in set							
50PP8541/93	401	DPTV355	SBHV00030A	P-BGDKI,S-BGDKK1,N-M/4.43	F-Korea/BG/China,N-BGDKIL,BI NICAM BGD/2CS-BG	160-276V		TEDE9-201A	See sticker in set							
50PP8545/69	447	DPTV465	SBHV00030A	N-M/4.43(5.5), P-BGDKI, S-BGDKK1	BI NICAM BGD/2CS-BG, F-Korea/BG/China, N-BGDKI	90-276 AutoV	45x58x24	TEDE9-200A	115	219	194	111	53	220	0	0
50PP8545/93	541	DPTV465	SBHV00030A	P-BGDKI,S-BGDKK1S-BGDKK1,N-M/4.43(5.5)	F-Korea/BG/China,N-BGDKIL,BI NICAM BGD/2CS-BG	113x148x62	160-276V	UV1358E/A	58	190	7	230	187	128	0	0
55PL9874/12	506	EM8E	RC4301/01	P-BGBG60HzDKI, S-BGDKLL'	F-BG/Czech,N-BGDKIL	220-240V		UV1316/A I X U-3	See sticker in set							
55PP8621/61	401	DPTV325	SBHV00032A	N-M	F-Korea	90-276 AutoV	53x57x26	TEDH9-202A	See sticker in set							

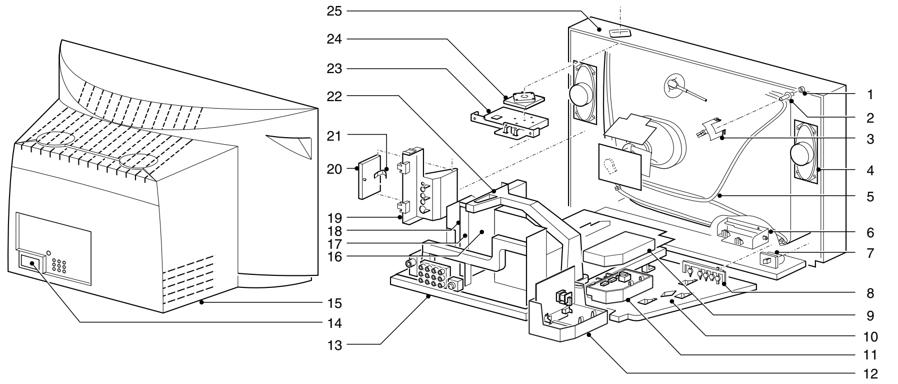
STYLING 305











STYLING 305.eps
040804

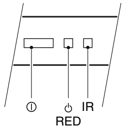
1bdgh*	3104 308 74023	CRT insert 32"
2acef*	4822 505 11195	CRT screw
2bdgh*	4822 502 21359	CRT screw
3acef*	4822 403 70906	Bracket fix deg. coil (4x)
3bdgh*	4822 404 31289	Bracket fix deg. coil (4x)
4	2422 264 00386	Loudspeaker
5acef*	2422 549 44621	Degaussing coil
5bdgh*	2422 549 44244	Degaussing coil
6	3104 304 21853	Bracket mains unit
7ab*	3104 307 98171	Mains knob
7cd*	3104 307 97721	Mains knob
7efgh*	3104 307 96232	Mains knob
8	3104 304 21871	Light guide
9abefgh*	3104 304 22762	Cover for Mains Harmonic panel
10	3104 304 22012	Bottom plate
11abefgh*	3104 304 22751	Bracket for Mains Harmonic panel
12abefgh*	3104 304 21652	Bracket for DAF/DC-shift panel
12cd*	3104 304 23041	Bracket for DAF/DC-shift panel
13abefgh*	3104 304 21293	Bracket for LSP
13cd*	3104 304 23001	Bracket for LSP
14b*	3104 304 22301	Service connector cover
14acdefgh*	3104 304 22312	Service connector cover
15ae*	3104 307 96331	Rear cover assy
15b*	3104 307 96342	Rear cover assy
15c*	3104 307 97381	Rear cover assy
15d*	3104 307 97391	Rear cover assy
15f*	3104 308 10221	Rear cover assy
15gh*	3104 307 96254	Rear cover assy
16	3104 301 23963	SSB shielding (bottom cover)
17abefgh*	3104 301 23942	SSB shielding (frame)
17cd*	3104 301 24121	SSB shielding (frame)
18	3104 301 23952	SSB shielding (top cover)
19abdfgh*	3104 304 24041	Bracket for Side I/O panel
19ce*	3104 304 21932	Bracket for Side I/O panel
20	3104 304 21911	Door Side I/O
21	3104 301 23972	Metal spring for door
21	3104 308 70381	Locking unit for door
22abefgh*	3104 304 25291	Bracket for LOT/SSB
22cd*	3104 304 23011	Bracket for LOT/SSB
23	3104 304 19794	Top Control bracket
24	3104 304 20921	Top Control keypad

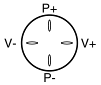
25a*	3104 328 14813	Cabinet assy
25b*	3104 328 14804	Cabinet assy
25ce*	3104 328 15001	Cabinet assy
25d*	3104 328 14991	Cabinet assy
25f*	3104 328 20102	Cabinet assy
25gh*	3104 328 20132	Cabinet assy
a*	3104 300 12201	Word mark
b*	3104 300 12191	Word mark
cef*	4822 454 13455	Word mark
dgh*	4822 454 13399	Word mark
ace*	9301 852 40306	Picture tube W66ERF041X044
acef*	9301 899 90306	Picture tube W66ERF042X044
bd*	9301 852 00314	Picture tube W76ERF041X044
bdgh*	9301 880 70314	Picture tube W76ERF042X044
ab*	4822 157 11825	Rotation coil
cd*	3128 138 60651	Rotation coil
efgh*	3128 138 60661	Rotation coil
	4822 321 11493	Mains cord (/05)
	4822 321 11499	Mains cord (/12, /19, /58)
	2422 070 98132	Mains cord (/79)
	4822 402 11183	Mains cord holder
	3104 207 09532	Remote RC 2592/01B
	3104 300 20181	Adapter EURO to Cinch/SVHS (/79)
	3104 300 20191	Adapter EURO to 3 x Cinch for (/79)

*a	28PW8707/xx
*b	32PW8707/xx
*c	28PW8807/xx
*d	32PW8807/xx
*e	28PW8817/xx
*f	28PW8717/xx
*g	32PW8717/xx
*h	32PW8757/xx
	28PW8818/xx
	32PW8818/xx
	32PW8858/xx

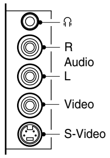
STYLING 312

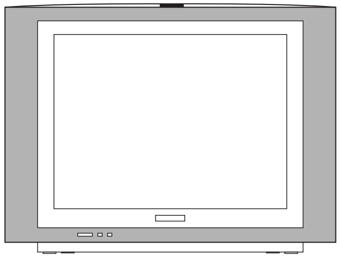
FRONT + TOP CONTROL

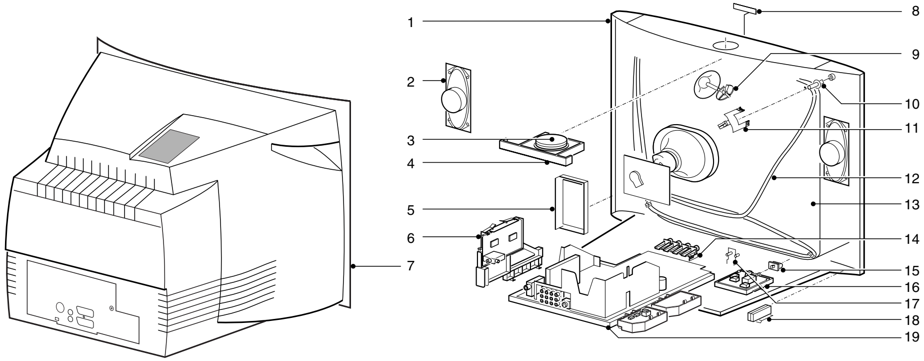




SIDE I/O







STYLING 312.eps
050804

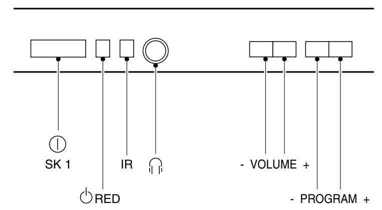
1	3111 257 56891	Cabinet 29”
1d*	3141 047 69581	Cabinet 29”
2	3139 128 76301	Loudspeaker 8Ω 5W
2d*	2422 264 00479	Loudspeaker 16Ω 5W
3	3139 137 66921	Top control button
3d*	Not applicable	
4	3139 124 30381	Top control bracket
4d*	Not applicable	
5	3139 124 37662	Side AV bracket
5d*	3139 124 49861	Side AV bracket (2P+HP)
7	3111 257 56641	Rear cover
7d*	3141 057 80981	Rear cover (4AV)
8	4822 454 13455	Word mark Philips
8d*	3139 120 01601	Word mark
9	3111 254 23481	EHT & degaussing coil clamp
9c*	4822 404 31341	EHT & degaussing coil clamp
9d*	4822 532 61201	EHT spacer
10	4822 505 11195	CRT fixing screw
10d*	Not applicable	
11	3139 124 31122	Corner coil bracket
11c*	3104 304 14411	Corner coil bracket
11d*	Not applicable	
12	2422 549 44579	Degaussing coil 29"
12c*	3104 308 20381	Degaussing coil 29"
12d*	2422 549 44579	Degaussing coil 21" (multi voltage)
15	3139 124 33801	Mains knob
15d*	3141 057 69591	Mains knob
16	3139 124 32522	Front interface bracket

16d*	Not applicable	
17	3139 124 33811	Light guide
17d*	3139 124 47501	Light guide
18	4822 404 31291	Mains cord relief
19	3139 124 33541	Chassis tray
19d*	Not applicable	
	4822 532 13136	Insulator ring (VO)
	4822 321 11499	Mains cord EU
	2422 070 98236	Mains cord (UK)
a*	9322 162 09682	Picture tube 29” A68QCP891X604
b*	9322 177 18682	Picture tube 29” A68QCP891X628
c*	9301 915 20347	Picture tube 29” A68ERF012X013

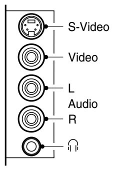
*a	29PT5506/01, /01E, /58
*b	29PT5507/01, /58
*c	29PT5507/21
*d	21PT2324/56R

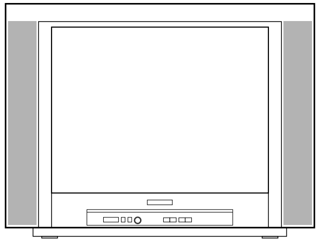
STYLING 326

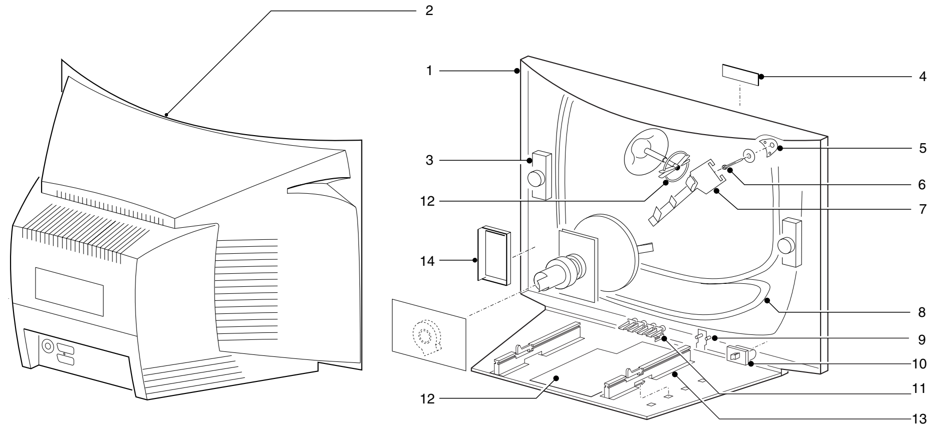
FRONT + TOP CONTROL



SIDE I/O





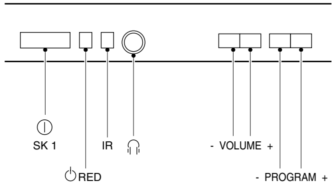


1	3139 124 34961	Cabinet
1a*	3139 138 15311	Cabinet DVDT
1b*	3139 137 79441	Cabinet ITV
1cefp*	3141 057 65211	Cabinet
1d*	3139 177 60691	Cabinet
1k*	3139 124 34962	Cabinet
1o*	3141 047 66591	Cabinet
2	3139 124 41081	Rear cover (12AV) AP
2b*	3139 124 37391	Rear cover (UIR) ITV
2c*	3141 054 22421	Rear cover
2d*	3139 124 35181	Rear cover
3a*	2422 264 00411	Loudspeaker 16Ω 5W
3bp*	2422 264 00444	Loudspeaker 8Ω 10W
3fghjo*	2422 264 00409	Loudspeaker 8Ω 5W
4abcdef*	3141 050 00161	Word mark
4ghjkmnop*	3141 050 00291	Word mark
5	Not applicable	
6	4822 505 11195	CRT fixing screw
7abcdef*	4822 404 31434	Coil clamp
7ghjkmn*	3141 054 22351	Corner coil bracket
8	3106 107 30341	Degaussing coil (Latam only)
8	3139 128 76341	Degaussing coil (Nafta only)
8	4822 157 11537	Degaussing coil (multi voltage)
8abc*	3139 128 23361	Degaussing coil (/79R only)
8op*	3139 128 23371	Degaussing coil 25” (multi voltage)
9	3139 124 32221	Light guide
10	3139 124 36331	Mains knob
10aefop*	3141 057 64591	Mains knob
10b*	3139 177 65691	Mains knob
11	3139 124 36311	Control knob
11aef*	3141 057 64601	Control knob
11b*	3139 177 65681	Control knob
12	4822 532 61201	EHT spacer
13	4822 463 11226	Chassis guide (VO)
14	3139 124 39541	Side AV bracket (HP+3AV)
14fghjo*	3141 054 22541	Side AV bracket (HP)
bhn*	9322 163 87682	Picture tube A59QDF891X001(L)
op*	9301 935 20522	Picture tube A59QDC257X61(N)

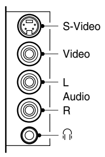
*a	25PT2252
*b	25HT2212
*c	25PT4323
*d	24PT6331
*e	25PT5307/60
*f	25PT5207/60
*g	25PT3323/67R
*h	25PT3323/69S
*j	25PT3323/71R
*k	25PT4323/56S
*m	25PT4323/67R
*n	25PT4323/69S
*o	25PT5207/60S
*p	25PT5307/60S

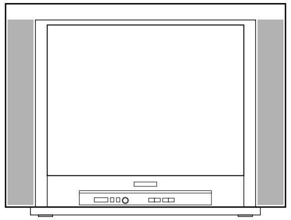
STYLING 328

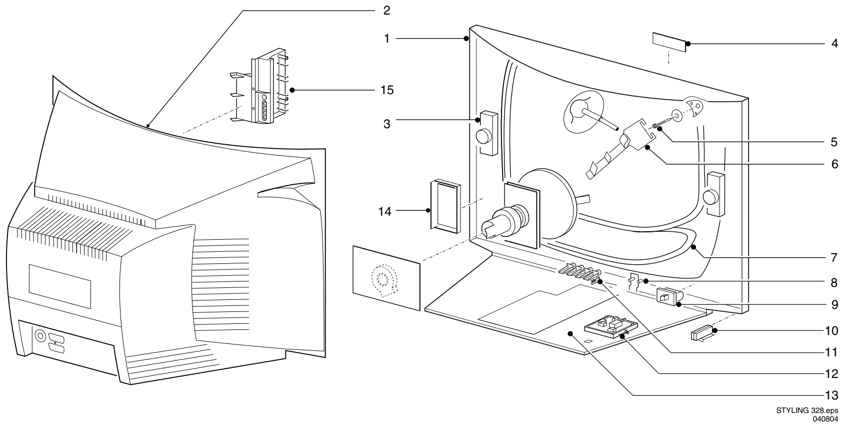
FRONT + TOP CONTROL



SIDE I/O





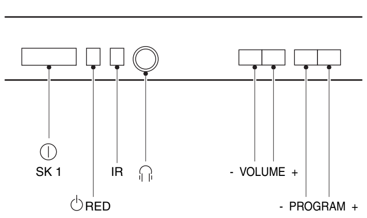


1	3139 138 15851	Cabinet
1a*	3139 138 12071	Cabinet ITV
1bgq*	3141 057 64861	Cabinet
1fp*	3139 177 58641	Cabinet
1hjm*	3139 124 33452	Cabinet
1kno*	3139 124 44751	Cabinet
1rst*	3141 047 80681	Cabinet
1u*	3141 047 79441	Cabinet
2a*	3139 124 35871	Rear cover (9AV+NFM)
2bghjmq*	3139 124 37231	Rear cover (12AV+SVHS)
2cdefkno*	3139 124 44741	Rear cover (12AV+SVHS)
2p*	3141 047 58691	Rear cover
2q*	3141 047 65241	Rear cover
2rst*	3139 177 81181	Rear cover
2u*	3141 047 90361	Rear cover
3	2422 264 00409	Loudspeaker 8Ω 5W
3a*	2422 264 00442	Loudspeaker 8Ω 5W
3rs*	2422 264 00485	Loudspeaker 8Ω 15W
4t*	3141 050 00291	Word mark
4hjkmno*	3141 050 00161	Word mark
5u*	4822 505 11195	CRT fixing screw
5fknoprst*	4822 502 14602	CRT fixing screw
6abcde*	3139 124 31122	Degaussing coil bracket
6f*	Not applicable	
6hjkmnopqrs*	3141 054 22351	Corner coil bracket
7	3139 128 23781	Degaussing coil 29" (full range)
7bc*	4822 157 11551	Degaussing coil
7t*	3139 128 23381	Degaussing coil
7u*	4822 157 11536	Degaussing coil
8	3139 124 30411	Light guide
8fknop*	3139 124 44761	Light guide
8rs*	3139 177 80641	Light guide
9abhjm*	3139 124 36331	Mains knob
9bgq*	3141 057 64591	Mains knob
9cdefp*	3139 177 58731	Mains knob
9kno*	3139 124 44781	Mains knob
9rst*	3139 177 80651	Mains knob
9u*	3139 137 83951	Mains knob
10	4822 404 31363	Mains cord relief
10fknoprstu*	Not applicable	
11abhjm*	3139 124 36311	Control knob
11bgq*	3141 057 64601	Control knob
11cde*	3139 177 58741	Control knob
11f*	3139 177 60081	Control knob
11knoprst*	Not applicable	
11u*	3139 137 84471	Control knob
12	3139 124 33461	Front interface bracket
12fknoprstu*	Not applicable	
13ft*	4822 463 11225	Chassis guide (HB)
13f*	4822 463 11226	Chassis guide (VO)
13ghjmq*	3139 124 33531	Chassis tray
13kno*	Not applicable	
13prs*	3139 124 25884	Chassis guide(HB)
13prs*	3139 124 25893	Chassis guide (VO)
13t*	4822 463 11226	Chassis guide (VO)
14	3139 124 33611	Side AV bracket
14fp*	Not applicable	
14kno*	3139 124 37061	Side Av bracket (HP+3P)
14p*	3141 054 22951	Side AV bracket
14rst*	3139 124 40131	Side AV bracket
14u*	3139 124 39541	Side AV bracket
15	Not applicable	
ade*	9322 196 07682	Picture tube A68QDL282X062
hjn*	9322 196 06682	Picture tube A68QDL281X062
r*	9301 962 60542	Picture tube A68QCU770X73(Q)
s*	9301 962 50542	Picture tube A68QCU770X73(S)
	9322 173 75682	Picture tube A68QCP893X001
t*	9301 946 60542	Picture tube A68QCU770X73(N)
u*	9322 163 87682	Picture tube A59QDF891X001(L)

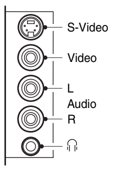
*a	29HT2211/69Z
*b	29PT3223/79R
*c	29PT3323/79R
*d	29PT3323/69R
*e	29PT3323/71R
*f	29PT5107/60
*g	29PT5207/60
*h	29PT3223/56R
*j	29PT3223/67R
*k	29PT3223/69S
*m	29PT3223/71R
*n	29PT3323/67R
*o	29PT3323/69S
*p	29PT5107/60S
*q	29PT5207/60S
*r	29PT3324/69R
*s	29PT3324/79R
*t	29PT3324/93R
*u	25HT2212/93R

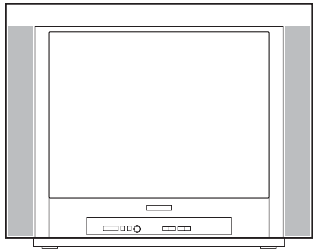
STYLING 329

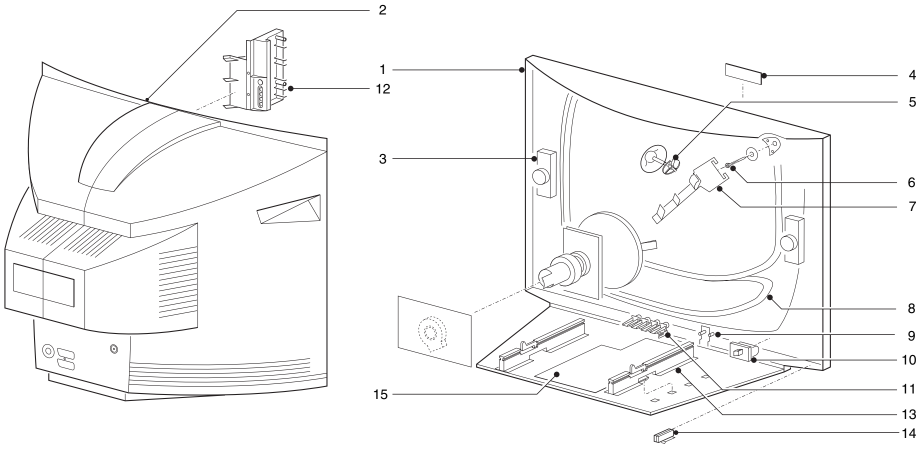
FRONT + TOP CONTROL



SIDE I/O





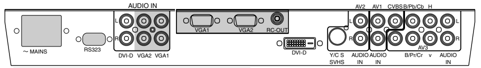


STYLING 529.eps
291004

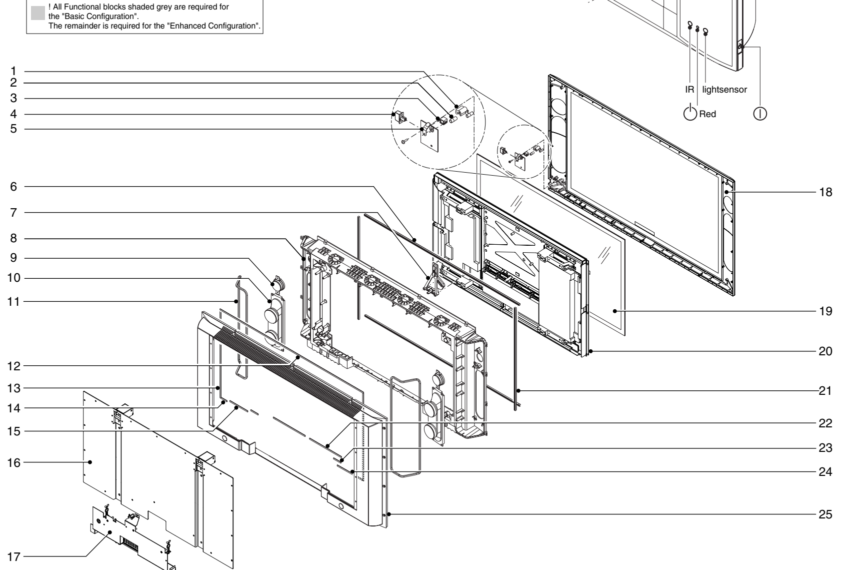
1	3139 137 78821	Cabinet 29”
1*	3138 138 12071	Cabinet 29”
2	3139 124 35131	Rear cover 29”
3	2422 264 00404	Loudspeaker 8Ω 6W
3*	2422 264 00442	Loudspeaker 8Ω 5W
4	3139 120 01361	Word mark (grey)
4*	3141 050 00161	Word mark 29”
5	4822 532 61201	EHT Spacer
6	4822 505 11195	CRT fixing screw
7	4822 492 71627	Degaussing coil bracket
7*	3139 124 31121	Degaussing coil bracket
8	4822 157 11549	Degaussing coil 29" Multi-volt
8	4822 157 11551	Degaussing coil 29" Single-volt (…/79R)
8	4822 157 11549	Degaussing coil 29" multi volt (…/71R)
8*	3139 128 23381	Degaussing coil 29”
9	4822 380 10251	Light guide
9*	3139 124 30411	Light guide
10a*	4822 410 11766	Mains knob
10b*	3139 137 80321	Mains knob
10c*	3139 137 83951	Mains knob
11a*	4822 410 11765	Control knob
11b*	3139 137 80311	Control knob
11c*	3139137 84470	Control knob
12a*c*	4822 404 31363	Mains cord relief
12b*	3122 224 04623	Mains cord relief
13	4822 463 11225	Chassis guide (HB)
13	4822 463 11226	Chassis guide (VO)

13*	3139 124 33531	Chassis guide (L9)
	3139 128 75211	Mains cord
	3139 128 75230	Mains cord (…/79R)
	3139 124 23051	Mains cord
	4822 131 20628	Picture tube 29” A68AJB82X01
	9301 905 00523	Picture tube A68QCU757X73(N)
a*	29PT2152	
b*	29PT2152/71R	
c*	29HT2212/93R	

STYLING 335



▨ ! All Functional blocks shaded grey are required for the "Basic Configuration".
The remainder is required for the "Enhanced Configuration".



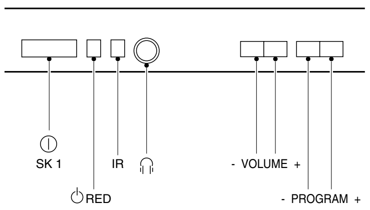
STYLING 335.eps
011001

1ab*	3122 124 36071	Lens
1cd*	3122 124 36211	Lens
1ef*	3122 124 36261	Lens
2	3122 124 36271	Light guide
3abcd*	3122 124 36081	Day light filter
4abcd*	3122 128 13901	On/off knob
4ef*	3122 128 14292	On/off knob
5abcd*	3122 121 67251	Led switch spring
6ab*	3122 358 76201	EMC shielding foam long
6cd*	3122 358 76463	EMC shielding foam long
7	3122 124 36172	Cable track
8ab*	3122 128 13911	Shielding frame
8cd*	3122 128 14231	Shielding frame
8ef*	3122 128 14271	Shielding frame
9abcd*	2422 264 00432	Tweeter
10abcd*	2422 264 00433	Loudspeaker twin
11abcd*	3122 358 76221	Loudspeaker foam
12ab*	3122 358 76151	EMC shielding foam top
12cdef*	3122 358 76451	EMC shielding foam top
13ab*	3122 357 76161	EMC shielding foam L+R
13cdef*	3122 358 76441	EMC shielding foam L+R
14ab*	3122 358 76251	EMC shielding foam bottom L1
14cdef*	3122 358 76411	EMC shielding foam bottom 4
15ab*	3122 358 76261	EMC shielding foam bottom L2
15cdef*	3122 358 76421	EMC shielding foam bottom 5
16ab*	3122 128 13951	Metal back plate
16cdef*	3122 128 14322	Metal back plate
17ac*	3122 128 13681	Connector plate
17bd*	3122 128 13695	Connector plate
17ef*	3122 128 14392	Connector plate
18a*	3122 357 21201	Front assy -/01S, -/x2Z, -/x2S
18ab*	3122 357 21361	Front assy -/69S
18b*	3122 357 21391	Front assy -/17S
18c*	3122 357 21421	Front assy -/01S, -/x2Z, -/x2S
18c*	3122 357 21513	
18d*	3122 357 21512	Front assy -/01S, -/17S, /69S
18e*	3122 357 21582	Front assy
18f*	3122 357 21681	Front assy
18g*	3104 308 12291	Front assy
18h*	3104 328 33041	Front assy
19ab*	3122 124 90781	Glass plate
19cdef*	3122 124 90811	Glass plate
20ab*	9322 178 04682	Display FPF32C106128UA-52
20ab*	9322 190 61682	Display FPF32C106128UA-62
20ab*	9322 194 11682	Display FPF32C106128UA-72
20cdef*	9322 185 78682	Display FPF42C128128UB-54
20cdef*	9322 194 10682	Display FPF42C128128UB-72
21ab*	3122 358 76211	EMC shielding foam short
21cdef*	3122 358 76473	EMC shielding foam short
22ab*	3122 358 76191	EMC shielding foam bottom 3
22cdef*	3122 358 76401	EMC shielding foam bottom 3
23ab*	3122 358 76181	EMC shielding foam bottom 2
23cdef*	3122 358 76391	EMC shielding foam bottom 2
24ab*	3122 358 76171	EMC shielding foam bottom 1
24cdef*	3122 358 76381	EMC shielding foam bottom 1
25ab*	3122 128 13871	Back display assy
25cd*	3122 128 14221	Back display assy
25ef*	3122 128 14261	Back display assy
cdef*	3122 358 76431	EMC shielding foam bottom 6
cdef*	3122 128 14461	PDP bracket Large
cdef*	3122 128 14441	PDP bracket left
cdef*	3122 128 14451	PDP bracket right
	4622 007 51971	Mains cord EU
	2422 070 98107	Mains cord UK
	2422 070 98105	Mains cord China
	2422 070 98106	Mains cord Aus/NZ
	3122 358 75802	Mains cord US
	3122 358 76342	Mains inlet
abcd*	3122 358 76591	Thin VGA cable 2m with audio
ef*	3122 358 76581	Thin VGA cable 2m without audio
	3122 357 76611	Thin VGA cable 5m
	3139 228 89251	RC19335009/01
	3122 128 13921	Mounting kit
	3122 128 14301	Mounting kit -/17S
ab*	9097 210 04055	Coloured frame Champagne
ab*	9097 210 04056	Coloured frame Blue
ab*	9097 210 04057	Coloured frame Green
ab*	9097 210 04058	Coloured frame Rouge
ab*	9097 210 04059	Coloured frame Unpainted
cd*	9097 210 04202	Coloured frame Champagne
cd*	9097 210 04203	Coloured frame Blue
cd*	9097 210 04204	Coloured frame Green
cd*	9097 210 04205	Coloured frame Rouge
cd*	9097 210 04206	Coloured frame Unpainted

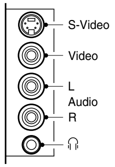
*a	32FD9944, 32HF9964, 32PF9965
*b	32FD9954
*c	42FD9944, 42HF9964, 42PF9964, 42PF9953
*c	42PF9965, 42PF9955
*d	42FD9954
*e	42FD9934, 42FD9945
*f	420P30/00
*g	BDH4211/00
*h	BDH4221/00

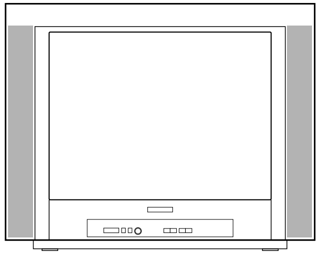
STYLING 340

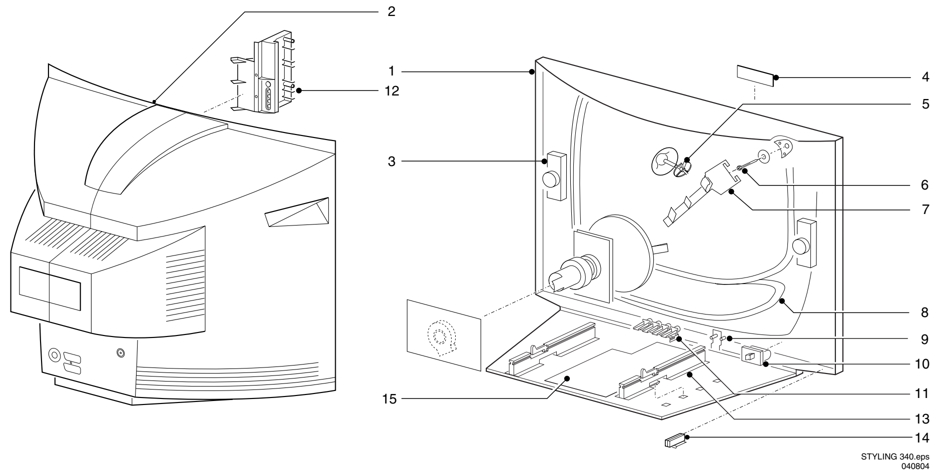
FRONT + TOP CONTROL



SIDE I/O





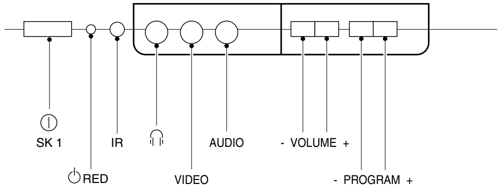


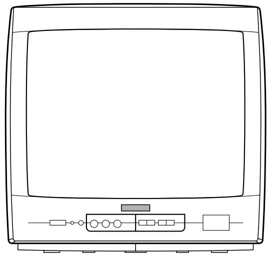
STYLING 340.eps
040804

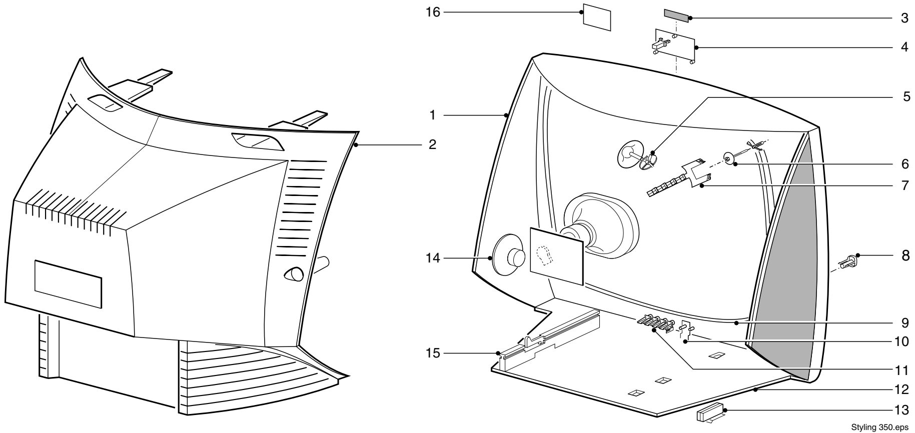
1	3139 137 79991	Cabinet 21"
1def*	3139 107 60021	Cabinet 21”
1g*	3141 054 23301	Cabinet 21”
2	3139 124 34391	Back cover 21”
2b*	3141 054 23341	Back cover 21”
3	2422 264 00411	Loudspeaker 16Ω 5W
4	3111 250 00841	Word mark (red silver)
4def*	3111 250 01031	Word mark (metal pearl)
4g*	3122 220 00203	Word mark
5	3111 254 23481	Coil & EHT clamp
6	3139 120 41391	CRT fixing screw
7	4822 404 30945	Degaussing coil bracket
7g*	3111 104 44664	Degaussing coil bracket
8	2422 549 45514	Degaussing coil
9	3139 124 34402	Light guide
10	3141 057 80961	Mains knob
11	3141 057 80951	Control knob
12abcdef*	3139 124 37661	Side AV bracket (3P+HP)
13	3139 124 36232	Chassis guide
14	4822 404 31291	Mains cord relief
15	3139 124 33291	VO plate
	4822 321 11499	Mains cord EU
	4822 321 11493	Mains cord UK
d*	2422 070 98094	Mains cord UK
ef*	3139 178 87361	Mains cord
	4822 131 11105	Picture tube A51EAL155X47
dg*	9301 952 80342	Picture tube A51EAL135X42
bc*	3139 128 76381	FM aerial
bd*	3111 257 71451	Stand (silver)

*a	21PT4457/01, 21PT4438/01
*b	21PT4457/05
*c	21PT4457/58
*d	21PT4458/05
*e	21PT4458/01
*f	21PT4458/58
*g	21PT1867/58

STYLING 350





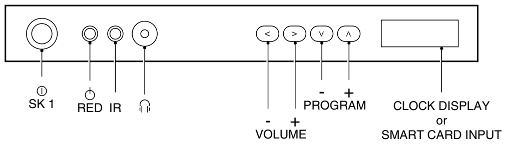


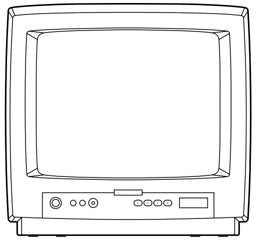
Styling 350.eps
181201

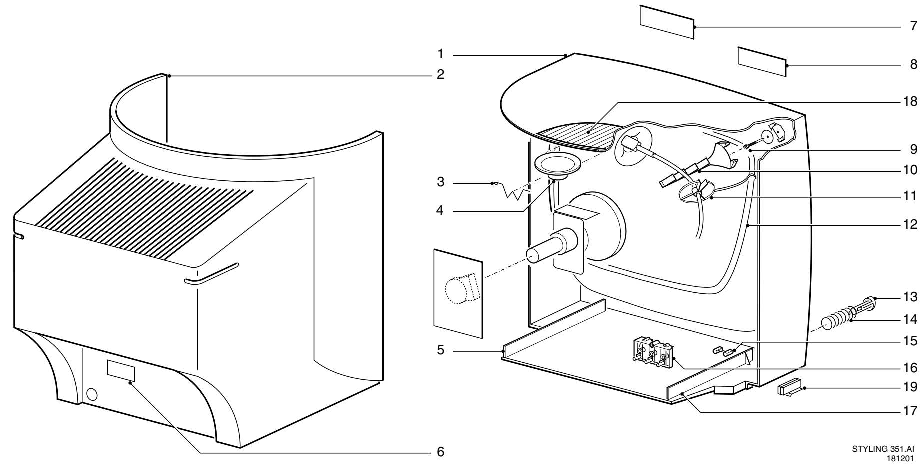
1	3111 257 57241	Cabinet
1c*	3111 257 57261	Cabinet
2	3139 137 92751	Rear cover
2c*	3111 254 25021	Rear cover
3	Not applicable	
4	Not applicable	
5	4822 401 11765	Coil & EHT clamp
5c*	3111 254 23481	Coil & EHT clamp
6ab*	4822 502 14508	CRT fixing screw
7	4822 404 31325	Degaussing coil bracket
7c*	2422 549 45835	Degaussing coil bracket
8	3139 137 79221	Mains knob
9	2422 549 44844	Degaussing coil 14”
9c*	2422 549 45304	Degaussing coil 14”
10	3111 254 25221	Light guide
11	3139 137 79231	Control knob
12	3139 124 34111	Bottom plate (VO)
13	4822 404 31291	Mains cord relief
14	2422 264 00412	Loudspeaker 8Ω 10W
15	3139 124 34091	Chassis guide (VO)
16ac*	3111 254 24951	Clock lens
16b*	3119 107 17501	Clock lens
	4822 321 11499	Mains cord EU
	4822 321 11493	Mains cord UK
	4822 321 11139	Mains cord
	9301 861 90301	CRT A34EAC01X113

*a	14HT3154
*b	14HT3304
*c	14HT3154N/01

STYLING 351





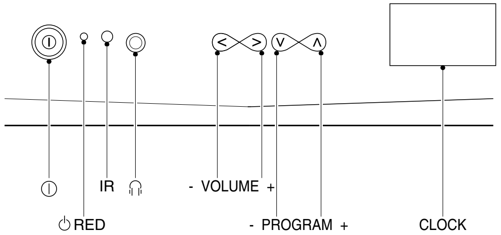


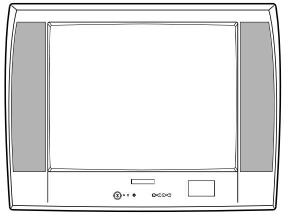
STYLING 351.AI
181201

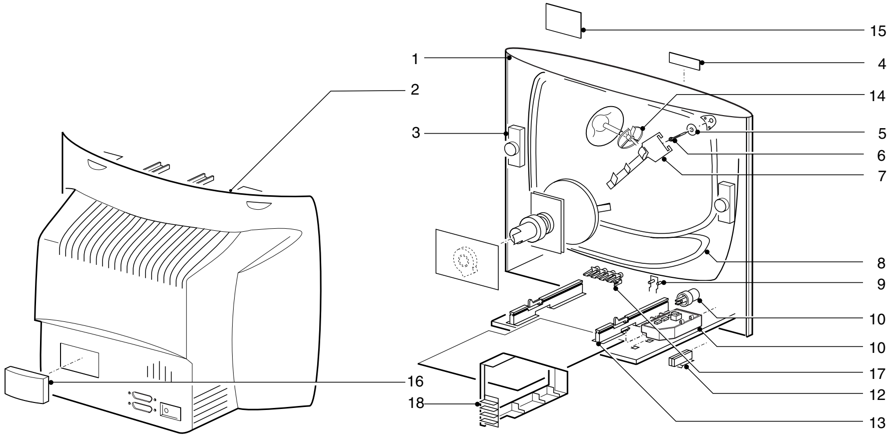
1	3111 257 57261	Cabinet 17”
2	3111 254 25021	Rear cover
3	Not applicable	
4	2422 264 00414	Loudspeaker 8Ω 5W
5	4822 463 11126	Chassis guide left
7a*	3119 104 27681	Clock lens
7b*	3119 107 05051	Clock lens
7c*	3119 107 05071	Clock lens
8	3111 250 00471	Word mark
9	4822 502 14508	CRT Fixing screw
10	3119 10418246	Degaussing coil bracket
10	3119 10418247	Degaussing coil bracket for A41EAM40X22
11	3111 254 23481	Coil & EHT clamp
12	2422 549 44843	Degaussing coil 17”
13	3111 254 09911	Mains knob silver
14	Not applicable	
15	4822 38010281	Light guide
16	3111 254 09921	Control knob silver
17	4822 463 11125	Chassis guide right
18	3111 254 09891	Loudspeaker grill
19	3139 124 23843	Mains cord relief
	4822 321 11499	Mains cord EU
	4822 321 11493	Mains cord UK
	9301 835 40301	Picture tube A41EAM40X20
	9301 918 60301	Picture tube A41EAM40X22

*a	17HT3154
*b	17HT3304
*c	17HT5404

STYLING 352





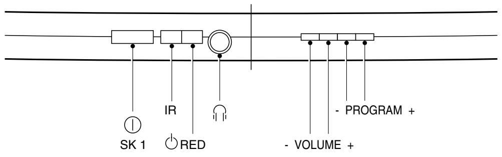


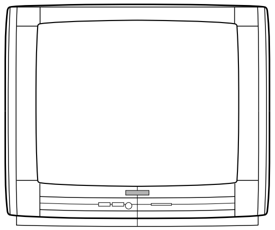
STYLING 352.eps
181201

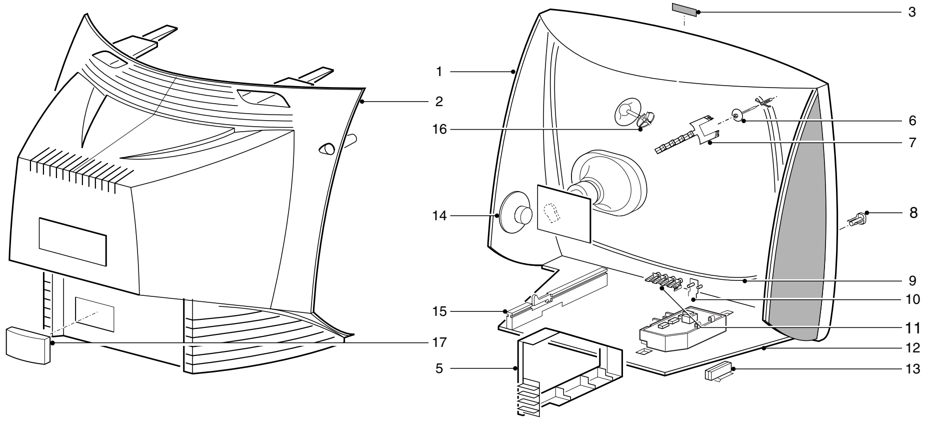
1	3111 257 57281	Cabinet 25"
1d*	3127 107 60111	Cabinet 25”
2	3111 254 25071	Rear Cover 25"
3	2422 264 00401	Loudspeaker 16Ω 5W
3c*	4822 240 10263	Loudspeaker 8Ω 6W
3d*	2422 264 00534	Loudspeaker 16-10W
4	3111 250 00731	Word mark Philips
4cd*	3111 250 00201	Word mark Philips
5+6	4822 505 11195	CRT Fixing screw
5+6d*	3104 308 77012	CRT Fixing screw
7	4822 403 70906	Corner coil bracket
8	2422 549 44253	Degaussing coil 25”
8d*	2422 549 45778	Degaussing coil 25”
9	4822 380 10251	Light guide
9d*	3139 124 25601	Light guide
10	3139 137 96621	Mains knob
11	3139 137 96611	Control knob
12	????	Mains cord relief
13	3139 124 30871	Chassis guide right
13	3139 124 30881	Chassis guide left
14	4822 401 11765	Coil & EHT clamp
14cd*	3111 254 23481	Coil & EHT clamp
15a	3119 107 05061	Clock lens
15acd*	3119 104 27691	Clock lens
16acd*	3139 124 30571	No system card cap
16b*	3119 104 28131	No system card cap
17	3119 107 17651	EPS bracket
	4822 131 11184	Picture tube A59EAK071X11
	4822 321 11499	Mains cord EU
	4822 321 11493	Mains cord UK

*a	25HT5404/01Z/05Z
*b	25HT5404/21R/25R
*c	25HT5404/01B
*d	25HT5405/05B

STYLING 353



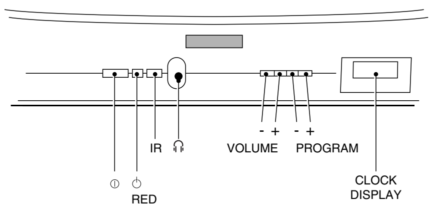


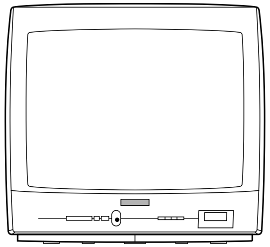


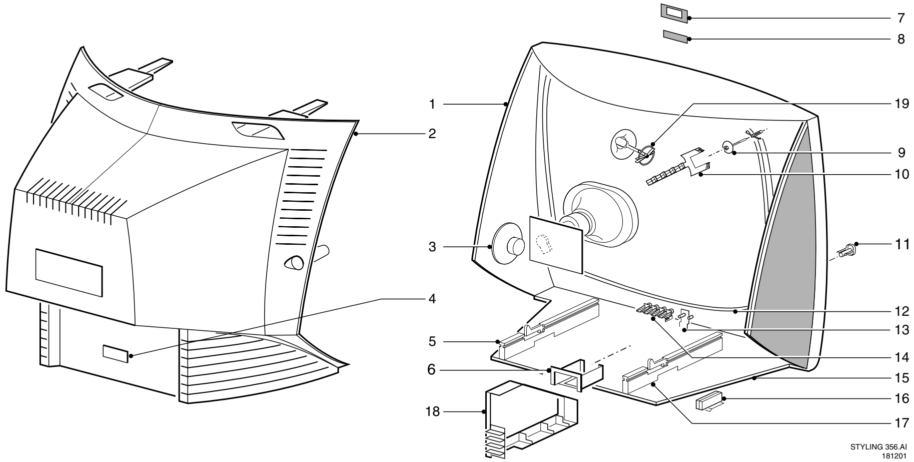
STYLING 353.eps
040804

1	3119 107 05142	Cabinet 28”
2a*	3111 254 25081	Rear cover
2b*	3111 254 25091	Rear cover
3	3111 250 00201	Word mark
4	3139 124 38211	Mains harmonic bracket
5	3119 107 17651	EPS bracket
6	4822 505 11195	CRT fixing screw
7	4822 403 70906	Corner coil bracket
8	3139 137 90651	Mains knob
9	4822 157 11762	Degaussing coil 28”
10	3139 124 37111	Light guide
11	3139 137 90661	Control knob
12	3139 124 30571	No system card cap
13	4822 404 31291	Mains cord relief
14a*	2422 264 00398	Loudspeaker 16Ω 5W
14b*	2422 264 00414	Loudspeaker 8Ω 5W
15	3139 124 30881	Chassis guide
16	4822 401 11765	Coil & EHT clamp
	4822 131 11045	Picture tube A66EAK071X11
	4822 321 11499	Mains cord EU
	4822 321 11493	Mains cord UK
*a	28HT5404	
*b	28HT5304	

STYLING 356





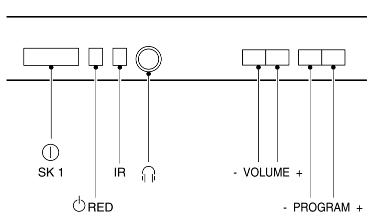


STYLING 356.AI
181201

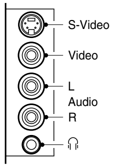
1	3111 257 57271	Cabinet
2abd*	3111 254 25051	Rear cover
2c*	3111 254 25061	Rear cover
3	2422 264 00398	Loudspeaker 16Ω 5W
4abc*	3139 137 69151	No card system cap
5	3139 124 36231	Chassis guide left
6	Not applicable	
7ad*	3111 254 24971	Lens for clock display
7b*	3119 107 05181	Lens for clock display
7c*	3119 107 17511	Lens for clock display
8	3111 250 00641	Word mark
9	4822 502 14508	CRT fixing screw
9d*	3139 120 41391	CRT fixing screw
10	4822 404 30945	Degaussing coil bracket
11	3139 137 76451	Mains knob
11	3139 138 17941	Mains knob for 21HT3154N
12	2422 549 44669	Degaussing coil 21”
12	2422 549 45514	Degaussing coil for 21HT3154N
13	3139 124 32301	Light guide
14	3139 137 76461	Control knob
14	3139 138 17951	Control knob for 21HT3154N
15	3139 124 33291	Plate VO
16	4822 404 31291	Main cord holder
17	3139 124 34091	Chassis guide right
18c*	3119 107 17651	EPS Bracket
19	4822 401 11765	Coil & EHT clamp
19	3111 254 23481	Coil & EHT clamp for 21HT3154N
	4822 321 11499	Mains cord EU
	4822 321 11493	Mains cord UK
	4822 131 11105	Picture Tube 21” A51EAL155X47
	9301 952 80342	Picture Tube 21” A51EAL135X42 for 21HT3154N
*a	21HT3154, 21HT4404	
*b	21HT3304	
*c	21HT5404	
*d	21HT3154N	

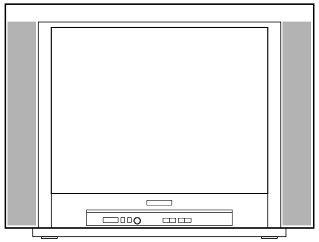
STYLING 374

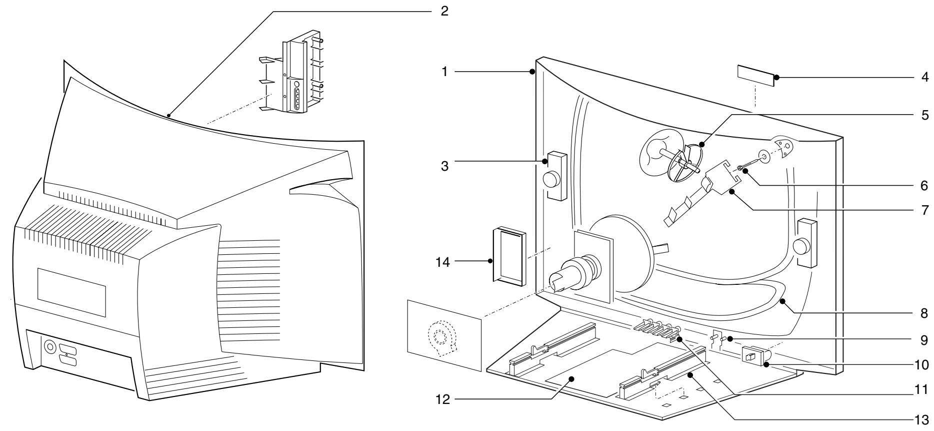
FRONT + TOP CONTROL



SIDE I/O







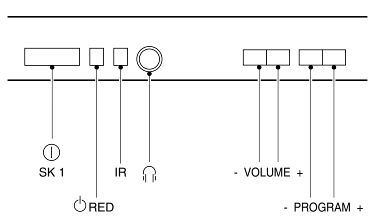
STYLING 374.eps
040804

1a*	3139 138 15271	Cabinet
1b*	3139 137 79751	Cabinet ITV
1c*	3141 057 64541	Cabinet
1d*	3141 057 64472	Cabinet
1e*	3139 177 67451	Cabinet (HP+3AV) USA
2a*	3139 124 34591	Rear cover (6AV+S) USA
2b*	3139 124 36681	Rear cover (9AV) ITV
2c*	3141 054 22401	Rear cover
2d*	3141 054 22361	Rear cover
2e*	3139 124 46481	Rear cover (NAV) USA
3ab*	2422 264 00444	Loudspeaker 8Ω 10W
3ce*	2422 264 00411	Loudspeaker 16Ω 5W
3d*	2422 264 00409	Loudspeaker 8Ω 5W
4ab*	3139 120 01371	Word mark (silver)
4cd*	3141 050 00301	Word mark
4e*	3141 050 00331	Word mark
5abc*	3141 054 22011	CRT spacer
5acde*	3139 124 17541	CRT spacer
6	3104 308 77012	CRT fixing screw
6	3104 308 77012	CRT Fixing Screw
7	3139 124 21372	Degaussing coil bracket
8abcd*	3139 128 23201	Degaussing coil 21" (multi voltage)
8acd*	3139 1 28 23191	Degaussing coil 21" (single voltage) (/79R)
8e*	3141 058 20131	Degaussing coil 21"RF USA
9	3139 124 32221	Light guide
10e*	3139 124 36331	Mains knob
10ab*	3139 137 83951	Mains knob
10cd*	3141 057 64591	Mains knob
10	9301 935 20522	Mains knob
10	9322 163 87682	Mains knob
11abc*	3139 124 36311	Control knob
11c*	3141 057 64601	Control knob
11e*	3139 137 94241	Control knob
12	3139 124 33341	V0 plate
13	3139 124 30812	Chassis guide (VO)
14	3139 124 39541	Side AV bracket
ab*	9322 153 82682	Picture tube 21" A51LSK955X01
cd*	9322 196 08682	Picture tube 21" A51LYZ095X01
e*	9301 903 81343	Picture tube 21" A51ERF135X82
ab*	9322 156 24682	Picture tube 21" A51LSK955X (/67R only)
ab*	2422 549 42609	Multi pole unit JH88DT-PL-00 (/67R only)
ab*	2422 549 44575	Deflection coil KDY3NWC32P (/67R only)

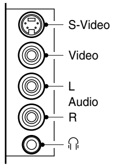
*a	21PT2251, 21PT2252
*b	21HT2211, 21HT2212
*c	21PT1323
*d	21PT3323
*e	20MS334R (20MS3341/37R)

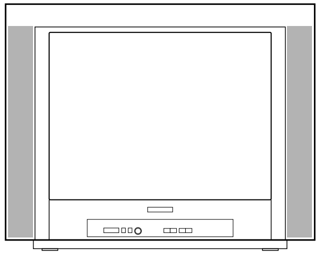
STYLING 375

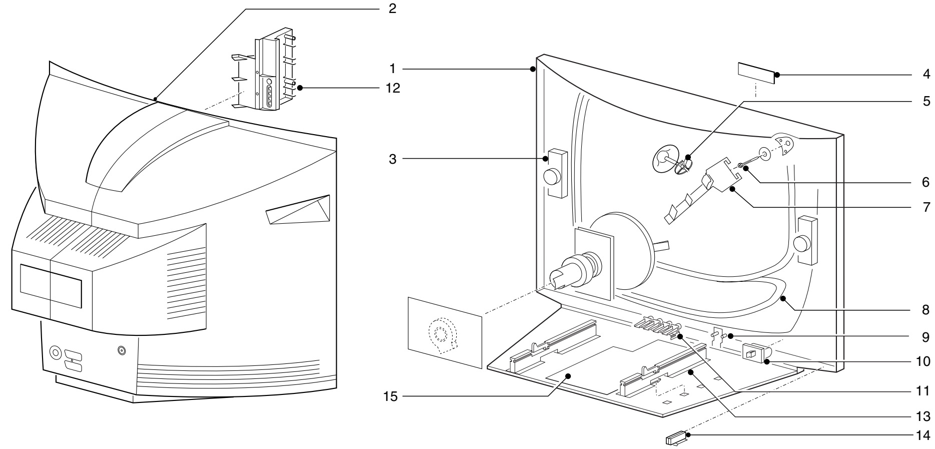
FRONT + TOP CONTROL



SIDE I/O







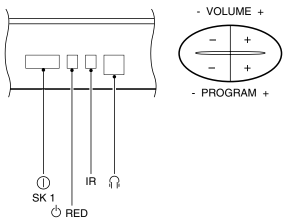
STYLING 375.eps
040804

1j*	3139 124 35601	Cabinet
1k*	3139 124 36511	Cabinet
1f*	3139 137 79751	Cabinet
1de*	3139 137 85831	Cabinet (HP+FC)
1	3139 138 18961	Cabinet NAFTA
1a*	3139 138 18962	Cabinet
1b*	3139 177 58462	Cabinet
1cm*	3141 048 18961	Cabinet
1gh*	3141 047 64541	Cabinet
1n*	3141 047 69501	Cabinet
2ab*	3139 124 42192	Rear cover NAFTA
2c*	3139 124 42191	Rear cover NAFTA
2d*	3139 124 35741	Rear cover (4AV+FM)
2e*	3139 124 35881	Rear cover ITV AP
2fgh*	3139 124 43771	Rear cover (4AV)
2j*	3139 124 35591	Rear cover (9AV)
2k*	3141 054 22361	Rear cover (12AV+SVHS)
2m*	3139 124 44901	Rear cover (NAV)
2n*	3141 057 81021	Rear cover (6AV+SVHS)
3	2422 264 00411	Loudspeaker 16Ω 5W
3hm*	Not applicable	
3kn*	2422 264 00409	Loudspeaker 8Ω 5W
4acdejm*	3141 050 00181	Word mark
4b*	3139 120 01371	Word mark (metal silver)
4fn*	3141 050 00301	Word mark
4gh	Not applicable	
4k	3141 050 00351	Word mark
5	4822 532 61201	EHT spacer
5n*	3139 124 23861	EHT spacer
6	4822 502 14508	CRT fixing screw/washer
6fghk*	4822 505 11195	CRT fixing screw
7abcde*	3141 054 22351	Cable tie
7	3139 124 10113	Bracket
7mn*	3139 121 08841	Cable connecting
8	4822 157 11444	Degaussing coil 21" (multi voltage)
8abc*	3139 128 23841	Degaussing coil 21" US
8n*	2422 549 00096	Degaussing coil
9	3139 124 34401	Light guide
9fk*	3139 124 32221	Light guide
9gh*	Not applicable	
10	3139 124 42181	Mains Knob
10acm*	3139 138 18951	Mains knob
10b*	3139 177 58441	Mains Knob
10dej*	3139 137 86061	Mains knob
10fghk*	3139 124 36331	Mains knob
10n*	3141 057 69461	Mains knob
11acm*	3139 177 51741	Control knob USA
11b*	3139 177 58431	Control knob USA
11de*	3139 137 86011	Control knob
11fgh*	3139 124 36311	Control knob
11j*	3139 124 37962	Control knob
11k*	Not applicable	
11n*	3141 057 69451	Control knobs
12	Not applicable	
13	3139 124 30811	Chassis guide (VO)
13gh*	Not applicable	
14	Not applicable	
15	3139 124 33291	VO plate
15fk*	3139 124 33341	VO plate
15ghmn*	Not applicable	
	9301 843 10329	Picture tube A51EHW135X47
fghk*	9322 196 08682	Picture tube A51LYZ095X01
j*	4822 131 20581	Picture tube A51KXR95X01

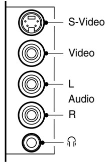
*a	21PS47S
*b	20L140
*c	20L145
*d	21PT2152, 21PT2011, 21PT2012, 21PT1320"
*e	21HT2017
*f	21PT1323/56S
*g	21PT1323/67R
*h	21PT1323/69S
*j	21PT2152/68R
*k	21PT3323/69S
*m	21PT529A/85R
*n	21PT2124/71R

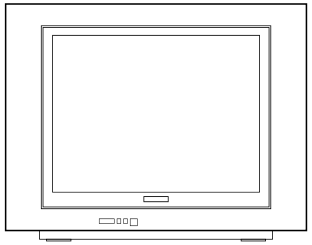
STYLING 377

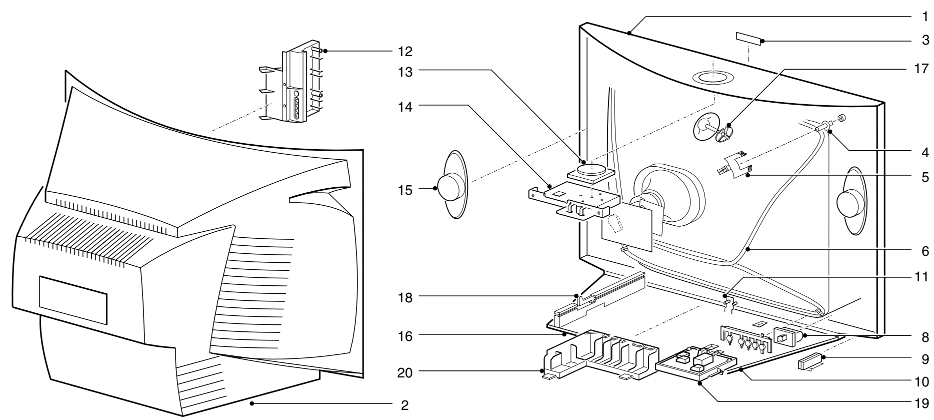
FRONT + TOP CONTROL



SIDE I/O







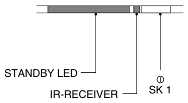
STYLING 377.eps
040804

1	3139 124 36511	Cabinet
1a*	3139 138 17631	Cabinet
1bc*	3139 137 78351	Cabinet US
1d*	3141 057 65971	Cabinet
1e*	3141 047 68001	Cabinet
1h*	3141 047 69561	Cabinet
2	3141 054 22361	Rear cover (12A+SVHS) AP
2a*	3139 124 34591	Rear cover (6AV+S) US
2bc*	3139 124 37531	Rear cover (12AV+SVHS) US
2d*	3139 124 40391	Rear cover
2h*	3141 057 81031	Rear cover (12AV+SVHS)
3	3141 050 00351	Word mark
3a*	3139 120 01371	Word mark
3bc*	3141 050 00181	Word mark
3deh*	3141 050 00301	Word mark
4	4822 505 11195	CRT fixing screw
5	3141 054 22351	Cable tie
5fg*	3139 124 21372	Degaussing coil bracket
6	4822 157 11446	Degaussing coil 21" (single voltage)
6ade*	4822 157 11444	Degaussing coil
6bc*	3139 128 23841	Degaussing coil
6h*	3139 128 23201	Degaussing coil 21" (multi voltage)
7	Not applicable	
8	3139 124 36331	Mains knob
8a*	3139 137 76521	Mains knob
8bc*	3139 137 92631	Mains knob
8d*	3141 057 65651	Mains knob
8e*	3141 057 64591	mains knob
8h*	3141 057 69571	Mains knob
9	Not applicable	
9abcd*	3122 224 04623	Mains cord relief
10	3139 124 33341	VO plate
10d*	3139 124 39161	V0 plate
11	3139 124 32221	Light guide
11d*	3139 124 41421	Light guide
12aegh*	3139 124 39541	Side AV bracket (HP+3AV)
12bc*	3139 124 34251	Side AV bracket
12d*	3139 124 37061	Side AV bracket
12f*	3141 054 22541	Side AV bracket (HP)
13	3139 137 66921	Top control cover
13abc*	3139 124 31131	Top control cover
13+14d*	3141 057 65961	Top control
13h*	Not applicable	
14	3139 124 30381	Top control bracket
14d*	3139 124 30391	Top control bracket
14*	Not applicable	
15	2422 264 00409	Loudspeaker 8Ω 5W
15ad*	2422 264 00444	Loudspeaker 8Ω10W
15bc*	2422 264 00411	Loudspeaker 16Ω 5W
16	Not applicable	
16abcd*	3139 124 40321	Front mains PCB bracket
17	4822 532 61201	EHT spacer
17h*	Not applicable	
17h*	3139 124 17541	EHT spacer (/69S, /56S)
18	3139 124 30811	Chassis guide (VO)
18d*	3139 124 25893	Chassis guide (VO)
19	Not applicable	
20	Not applicable	
	9322 196 08682	Picture tube A51LYZ095X01
abc*	9322 153 82682	Picture tube A51LSK955X01

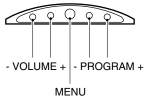
*a	21PT2301, 21PT2302
*b	20RF50S3
*c	21PV3022
*d	21PT4323
*e	21PT5407/21
*f	21PT3323/56S/67R
*g	21PT4223/69R/69S
*h	21PT3324/67S, /69S, /56S

STYLING 380

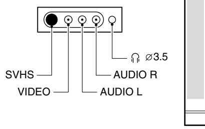
FRONT CONTROL

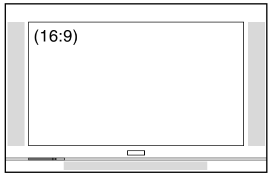


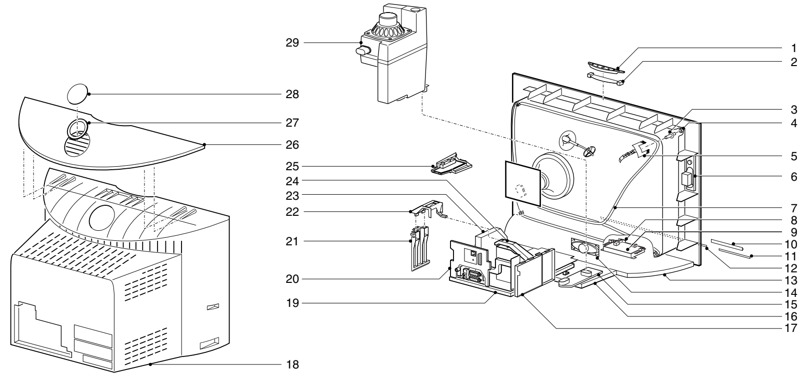
TOP CONTROL



SIDE I/O





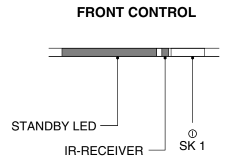


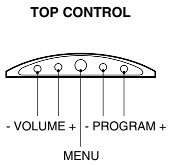
STYLING 380.eps
040804

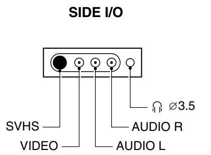
1	3104 307 98241	Top control keypad
2	3104 304 23431	Top control bottom
3	4822 404 31294	Insert (VP19000)
4	4822 502 21359	Picture tube screw
5a*	4822 403 70906	Bracket fix deg. coil short (4x)
5b*	4822 403 70906	Bracket fix deg. coil short (2x)
5b*	4822 404 31289	Bracket fix deg. coil long (2x)
5cdegh*	3104 304 21091	Bracket fix deg. coil short (4x)
6	2422 264 00429	Loudspeaker (2x)
7a*	2422 549 44621	Degaussing coil
7b*	3104 308 20401	Degaussing coil
7b*	3104 308 20731	Degaussing coil (/61R)
7c*	3104 308 20391	Degaussing coil
7ch*	3104 308 20721	Degaussing coil (/61R)
7deg*	2422 549 44243	Degaussing coil
7f*	2422 549 44256	Degaussing coil
8	3104 307 97621	Mains switch knob
9	3104 304 23471	Bracket Mains Switch panel
10	3104 304 23461	Light guide
11a*	3104 304 23651	Deco strip left
11bf*	3104 304 23621	Deco strip left
11cdegh*	3104 304 23591	Deco strip left
12a*	3104 304 23661	Deco strip right
12bf*	3104 304 23631	Deco strip right
12cdegh*	3104 304 23601	Deco strip right
13a*	3104 328 16531	Cabinet assy
13b*	3104 328 16572	Cabinet assy (for PHILIPS CRT)
13b*	3104 328 26951	Cabinet assy (for MEC CRT)
13b*	3104 328 16581	Cabinet assy (/69R, /79R)
13c*	3104 328 24361	Cabinet assy
13d*	3104 328 16611	Cabinet assy
13f*	3104 328 26781	Cabinet assy
13g*	3104 328 26791	Cabinet assy
13h*	3104 328 27632	Cabinet assy
14	2422 264 00431	Centre loudspeaker (1x)
15	3104 304 24241	Bracket Subwoofer support
16abc*	3104 304 23501	Bottom plate
16defgh*	3104 304 24351	Bottom plate
17	3104 304 23041	Bracket DAF/DC-shift panel
18a*	3104 307 98461	Rear cover assy
18b*	3104 307 98521	Rear cover assy
18b*	3104 307 98531	Rear cover assy (/69R, /79R)
18c*	3104 307 98601	Rear cover assy
18degh*	3104 307 98612	Rear cover assy
18f*	3104 307 98541	Rear cover assy
19	3104 304 23001	Frame for LSP
20ab*	3104 304 21331	Cover plate SCART3/wireless
20cdeh*	3104 304 24581	Cover plate SCART3/wireless
20fg*	3104 304 25392	Cover plate DVI-US
21	3104 304 24141	Bracket Auto-SCAVEM
22	3104 304 24151	Bracket SSB top-support
23	3104 301 24191	Shielding frame SSB (A-side)
23	3104 301 24201	Shielding frame SSB (Z-side)
23	3104 301 24211	Shielding cover SSB (A-side)
23	3104 301 24221	Shielding cover SSB (Z-side)
24	3104 304 24131	Bracket LOT-support
25abch*	3104 328 24351	Side I/O assy
25defg*	3104 328 17431	Side I/O assy
25	3104 304 23481	Side I/O bracket
26/28a*	3104 307 98631	Top cover assy (incl. disc)
26/28b*	3104 307 98641	Top cover assy (incl. disc)
26/28cdegh*	3104 307 98651	Top cover assy (incl. disc)
27	3104 308 78201	Rubber earring
28	3104 304 24002	Flying saucer
29	3104 130 01981	Subwoofer box
a*	3104 328 20441	Top control assy
b*	3104 328 17131	Top control assy
cdefgh*	3104 328 17301	Top control assy
	3104 300 12311	Matchline emblem
	3104 300 12241	Word mark PHILIPS
cdegh*	3104 304 21031	Bracket Rotation coil
	3128 138 60661	Rotation coil
a*	9301 899 90306	Picture tube W66ERF042X044
b*	9301 895 00301	Picture tube W76ERF052X044 (PHILIPS)
b*	9301 880 70301	Picture tube W76ERF042X044 (PHILIPS)
b*	9322 173 93682	Picture tube W76EKW 10X73 (MEC)
cdegh*	3104 300 50301	Picture tube W86LPX955X
ab*	3128 147 13981	Remote control RC2048
c*	3128 147 13991	Remote control RC2049
deh*	3128 147 14011	Remote control RC2060
f*	3128 147 14461	Remote control RC4305/01
	4822 321 11493	Mains cord (/05, /57)
	4822 321 11499	Mains cord (/12, /69)
	2422 070 98132	Mains cord (/79)
	3104 328 11841	Mains cord (/71, /55, /17)
	3139 128 75261	Mains cord (/77)
	4822 402 11183	Mains cord holder

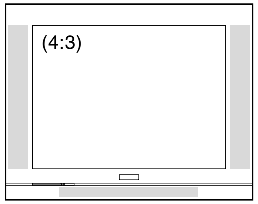
*a	28PW9527/xxx
*b	32PW9527/xxx
*c	36PW9527/xxx
*d	34PW9818/xxx
*e	36PW9818/xxx
*f	30PW9819/xxx
*g	34PW9819/xxx
*h	36PW9818/xx

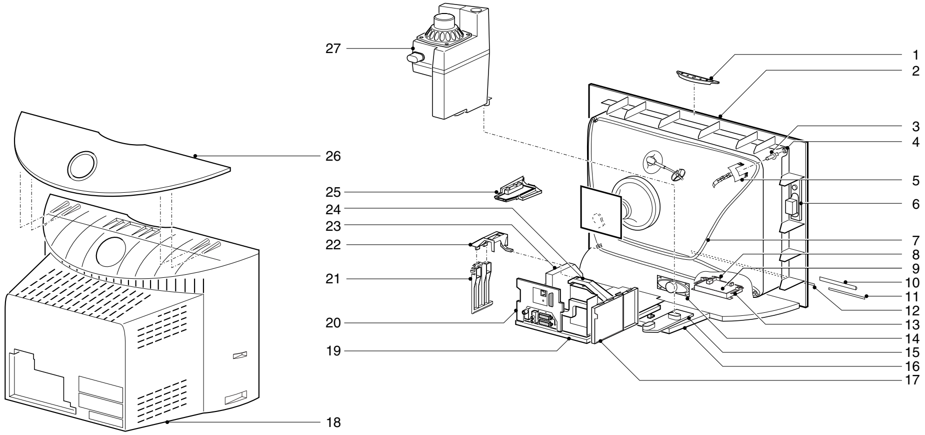
STYLING 382







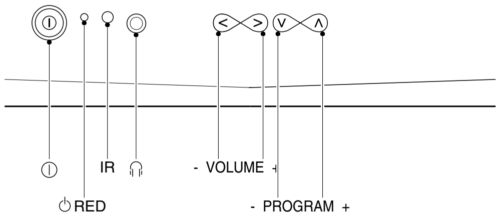


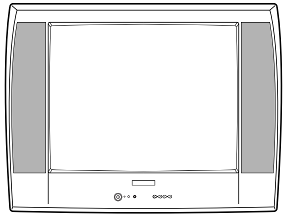


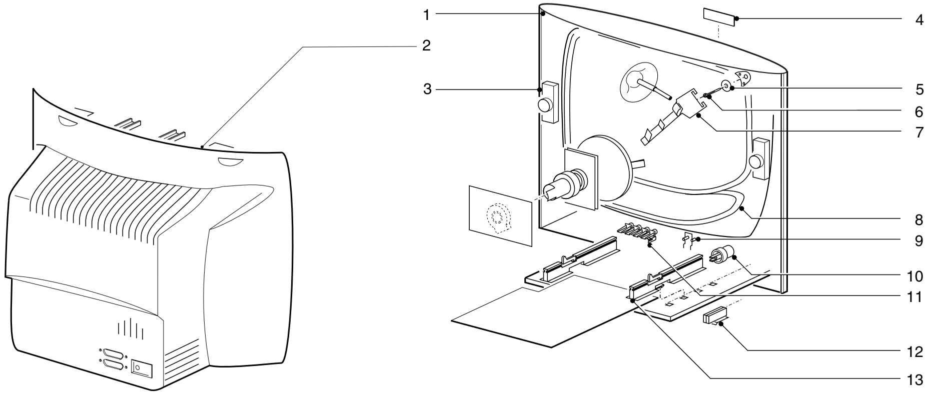
STYLING 382.eps
040804

1a*	3104 328 19791	Top control assy 29"
1b*	3104 328 17301	Top control assy 34"
2a*	3104 328 12231	Cabinet 29"
2b*	3104 328 12221	Cabinet 34"
3a*	4822 505 11195	CRT screw 29"
3b*	4822 502 21359	CRT screw 34"
4b*	4822 404 31294	CRT fixing insert (VP19000)
5a*	3139 124 31122	Bracket degaus. coil 29" (4x)
5b*	3139 124 32811	Bracket degaus. coil 34" (4x)
6	2422 264 00429	L/R loudspeaker (2x)
7a*	2422 549 44579	Degaus. coil 29" (/57)
7a*	3139 128 23781	Degaus. coil 29" (/61, /69, /71, /79)
7b*	3104 308 20361	Degaus. coil 34" (/57)
7b*	3104 308 20351	Degaus. coil 34" (/61, /69, /71)
8	3104 307 97621	Mains knob assy
10	3104 304 23461	Light guide
11a*	3104 304 23531	Deco strip left 29"
11b*	3104 304 23561	Deco strip left 34"
12a*	3104 304 23541	Deco strip right 29"
12b*	3104 304 23571	Deco strip right 34"
13	3104 304 23471	Bracket Mains Switch panel
14	2422 264 00431	Centre loudspeaker (1x)
15	3104 304 24241	Subwoofer support bracket
16	3104 304 24231	Bottom plate
17	3104 304 23041	Bracket for DAF panel
18	3104 307 97501	Rear cover assy 29"
18	3104 307 97491	Rear cover assy 34"
19	3104 304 23001	Bracket for LSP
20	Not applicable	
21	3104 304 24141	Bracket for SSB bottom support
22	3104 304 24151	Bracket for SSB top support
23	3104 301 24131	Shielding frame SSB (A-side)
23b*	3104 301 24191	Shielding frame SSB (A-side)
23	3104 301 24141	Shielding frame SSB (Z-side)
23b*	3104 301 24201	Shielding frame SSB (Z-side)
23	3104 301 24151	Shielding cover SSB (A-side)
23b*	3104 301 24211	Shielding cover SSB (A-side)
23	3104 301 24161	Shielding cover SSB (Z-side)
23b*	3104 301 24221	Shielding cover SSB (Z-side)
24	3104 304 24131	LOT support bracket
25	3104 328 24351	Side I/O assy
25	3104 304 23481	Side I/O bracket
26a*	3104 307 97561	V0 Top cover 29"
26b*	3104 307 97551	V0 Top cover 34"
27	3104 130 01981	Subwoofer box
a*	3104 304 22432	Bracket PIP/3D-comb panel
a*	3139 124 39581	Bracket Rotation coil 29"
b*	3104 304 21031	Bracket Rotation coil 34"
	3128 138 60661	Rotation coil
a*	9322 176 13682	Picture tube 29" A68QCP891X536 (/57, /61)
a*	9322 160 15682	Picture tube 29" A68QCP891X501 (/69, /71, /79)
b*	9322 185 70682	Picture tube 34" A80LTM350X89 (/57, /61)
b*	9322 185 75682	Picture tube 34" A80LTM351X89 (/69, /71)
	3128 147 14011	Remote RC2060 (/61, /69, /71, /79)
	3128 147 13991	Remote RC2049 (/57)
ab*	4822 321 11493	Mains cord (/57)
ab*	4822 321 11499	Mains cord (/69)
ab*	3104 328 24341	Mains cord (/61, /71)
ab*	2422 070 98207	Mains cord (/79)
	4622 006 06061	Mains cord (/93)
	4822 402 11183	Mains cord holder
	3104 300 12311	'Matchline' emblem
a*	3104 300 12231	'Philips' word mark 29"
b*	3104 300 12241	'Philips' word mark 34"
*a	29PT9420/xxR	
*b	34PT9420/xxR	

STYLING 393



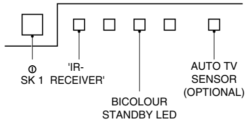


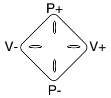


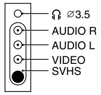
STYLING 393.eps
040804

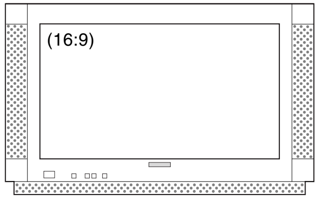
1a*	3139 138 19661	Cabinet
1b*	3141 054 21481	Cabinet
1c*	3139 124 47581	Cabinet
2a*	3141 054 22181	Rear cover
2b*	3139 137 92881	Rear cover
2c*	3141 057 82001	Rear cover
3	2422 264 00404	Loudspeaker 8Ω 6W
3c*	2422 264 00479	Loudspeaker 16Ω 5W
4a*	3141 050 00251	Word mark PHILIPS
4b*	2422 264 00404	Word mark
4c*	3139 120 01601	Word mark
5	Not applicable	
6ab*	4822 500 30034	CRT fixing screw
7a*	4822 404 31434	Degaussing coil bracket
7b*	3141 054 22351	Cable tie
8	4822 157 11549	Degaussing coil 29" 8c*3139 128 23201Degaussing coil 21”
9	3139 124 25601	Light guide
9c*	3139 124 47501	Light guide
10a*	3141 057 63011	Mains knob
10b*	3139 137 67141	Mains knob
10c*	3141 057 69591	Mains knob
11a*	3141 057 63091	Control knob
11b*	3141 054 21521	Control knob
11c*	3141 057 68721	Control knob
12ab*	4822 404 31363	Mains cord relief
13ab*	4822 463 11225	Chassis guide (HB)
13ab*	4822 463 11226	Chassis guide (VO)
	4822 131 11298	Picture tube A68ESF004X111
	9322 202 27682	Picture tube A51AKL13X10 (CPTO) B
*a	29PT2162/56A/69R	
*b	29PT2162/68R	
*c	21PT1627/60	

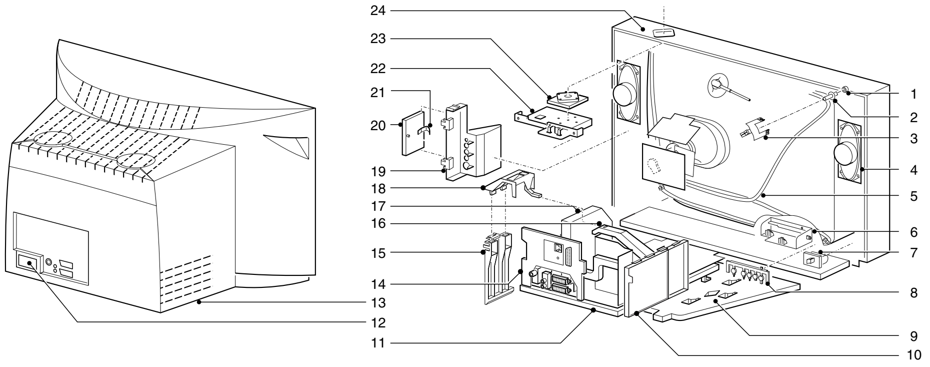
STYLING 395







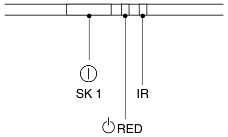




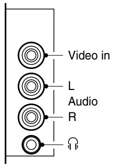
1	3104 308 74023	CRT insert
2	4822 502 21359	CRT screw
3	4822 404 31289	Bracket fix degaussing coil
4	3104 308 78281	Loudspeaker
5	3104 308 20401	Degaussing coil
6	3104 304 21856	Bracket mains unit
7	3104 307 96232	Mains knob
8	3104 304 21871	Light guide
9	3104 304 22012	Bottom plate
10	3104 304 23041	Bracket for DAF/DC-shift panel
11	3104 304 23003	Bracket for LSP
12	3104 304 22312	Service connector cover
13	3104 307 99111	Rear cover assy
14	3104 304 24581	Cover plate 2x2fH
15	3104 304 24141	Bracket for Auto-Scavem panel
16	3104 304 24131	LOT support bracket
17	3104 301 24191	Shielding frame SSB (A-side)
17	3104 301 24201	Shielding frame SSB (Z-side)
17	3104 301 24211	Shielding cover SSB (A-side)
17	3104 301 24221	Shielding cover SSB (Z-side)
18	3104 304 24151	Bracket for SSB top support
19+20+21	3104 328 20921	Side I/O assy
19	3104 304 24041	Bracket for Side I/O panel
20	3104 304 25271	Door Side I/O
21	3104 301 23972	Metal spring for door
22+23	3104 328 09732	Top control assy
22	3104 304 19794	Top Control bracket
23	3104 304 22561	Top Control keypad
24	3104 328 21633	Cabinet assy
	3104 300 11991	Word mark
	9301 895 00306	Picture tube
	3128 138 60661	Rotation coil
	2422 070 98132	Mains cord -/79
	4822 402 11183	Mains cord holder
	3104 300 20181	Adapter EURO to Cinch/S-VHS for -/57, /69, /79
	3104 300 20191	Adapter EURO to 3 x Cinch for -/57, /69, /79
	3128 147 13991	Remote control
	32PW8808/79R	

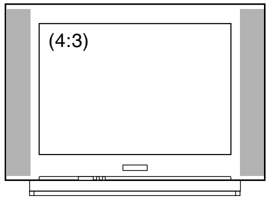
STYLING 397

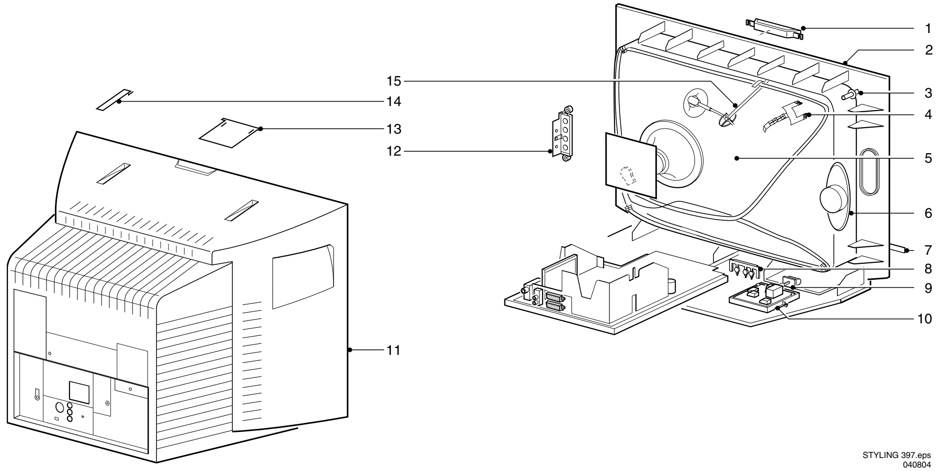
FRONT + TOP CONTROL



SIDE I/O

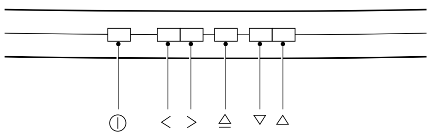


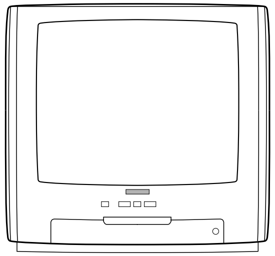


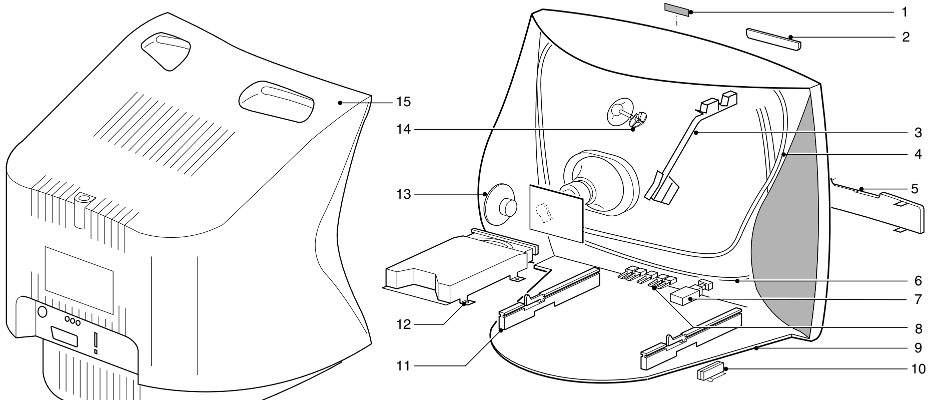


1ab*	3139 124 39171	Top control bracket
1ab*	3139 124 39181	Top control knob
1ab*	3139 138 13541	Top control assy
1c*	3139 137 66921	Top control button
1de*	3139 124 39182	Top control button
1f*	3139 124 30381	Top control bracket
2ab*	3139 138 13611	Cabinet 21"
2ab*	3141 057 65971	Cabinet 21” (silver)
2c*	3139 124 36511	Cabinet
2de*	3139 124 40372	Cabinet
2f*	3141 047 69561	Cabinet
3	4822 505 11195	CRT fixing screw
3f*	3104 308 77012	CRT fixing screw
4ab*	3139 124 33472	Degaussing coil bracket
4ab*	4822 492 71627	Degaussing coil bracket
4cde*	3141 054 22351	Degaussing coil bracket
4f*	Not applicable	
5a*	9301 904 98521	Picture tube A51QDJ279X77(N)(/56A,57R,71R,97R)
5a*	9301 904 99521	Picture tube A51QDJ279X77(Q) (/65R, 67R, 68R, 69R)
5a*	9301 906 40521	Picture tube A51QDJ279X77(S)(/79R)
5b*	9322 196 08682	Picture tube A51LYZ095X01
5c*	9322 202 27682	Picture tube A51AKL13X10
5de*	9322 196 08682	Picture tube A51LYZ095X01
5f*	9322 202 29682	Picture tube A51AKL13X10N
5f*	9322 202 30682	Picture tube A51AKL13X10R (/79R)
6	2422 264 00444	Loudspeaker 8Ω 10W
6cf*	2422 264 00409	Loudspeaker 8Ω 5W
7	3141 050 00301	Word mark (silver frost)
8	3139 124 41421	Light guide
8cf*	3139 124 32221	Light guide
9abe*	3141 057 65651	Mains knob silver
9c*	3139 124 36331	Mains knob
9d*	3139 124 39201	Mains knob
9f*	3141 057 69571	Mains knob
10	3139 124 30431	Front interface bracket
10cf*	Not applicable	
11	3139 124 40391	Rear cover
11c*	3141 054 22981	Rear cover
11f*	3141 057 81031	Rear cover (12AV+SVHS)
12ab*	3139 124 41141	Side AV bracket
12cf*	3139 124 39541	Side AV bracket (HP+3AV)
12de*	3139 124 37061	Side AV bracket (HP+3P)
13	3139 124 39161	V0 plate for rear cover
13cf*	3139 124 33341	VO plate
14	3139 124 42891	Screw cap for rear cover
14cf*	Not applicable	
15	Not applicable	
16abde*	3139 124 40331	Chassis guide (HB)
16abde*	4822 463 11226	Chassis guide (VO)
16cf*	3139 124 30811	Chassis guide (VO)
17	4822 157 11444	Degaussing coil 21" (multi voltage)
17h*	3139 128 23191	Degaussing coil 21" (single voltage) (/79R)
a*	3139 128 75230	Mains cord AUS/NZ
c*	2422 070 98236	Mains cord
bde*	2422 070 98199	Mains cord
f*	2422 070 98231	Mains cord
*a	21PT4320	
*b	21PT5307	
*c	21PT3324/56R	
*d	21PT4323/56S	
*e	21PT4323/69S	
*f	21PT3324/69R, /71R, /79R	

STYLING 398







STYLING 398.eps
040804

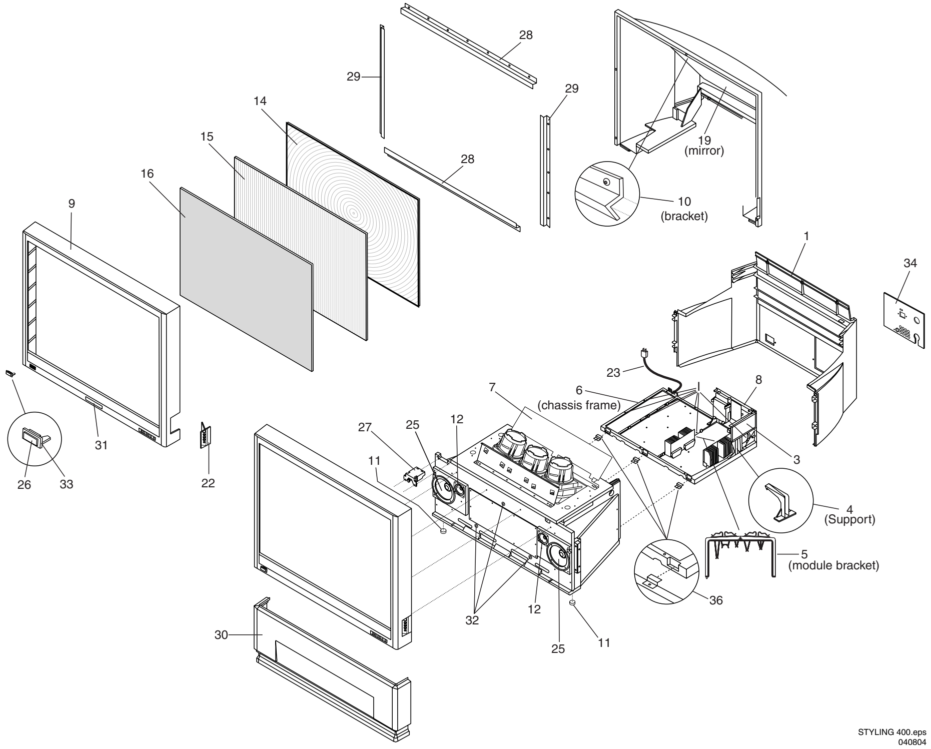
1	0134 660 64370	Word mark PHILIPS
2	0050 040 20170	Cover DVD
2	9051 040 20190	Cover DVD 14PT6007
3	Not applicable	
4	6085 800 03510	Degaussing coil
5	9054 610 03800	Transparent window
6	9051 082 02600	Mains knob
6	9051 082 03330	Mains knob 14PT6007
7	0810 000 00141	Mains switch
8	0051 070 00200	Control button
8	9051 082 03340	Control button 14PT6007
9	9051 101 42860	Cabinet
9	9051 001 43130	Cabinet 14PT6007
10	9051 100 02820	Chassis rail left
11	9051 100 02810	Chassis rail right
12	8211 400 11001	DVS Combo loader DSL-760
12	8417 100 00000	DVS Combo loader DSL-810
12	8417 100 00120	DVS Combo loader Cason MTK1379
12	8417 000 00010	DVS Combo loader Cason MTK1379 new
12	8417 100 00270	DVS Combo loader Cason LC Multi
	9051 040 20130	Cover DVD loader
13	6103 081 70001	Loudspeaker 8Ω 5W
15	9051 101 41810	Rear cover
15	9051 101 41980	Rear cover 14PT6007

0025 285 54011	Mains cord
0054 150 20210	Mains cord UK
0703 621 10151	Picture tube A33EKC02X01
0676 000 02181	Antenna rod
0676 000 02161	Antenna loop -/05

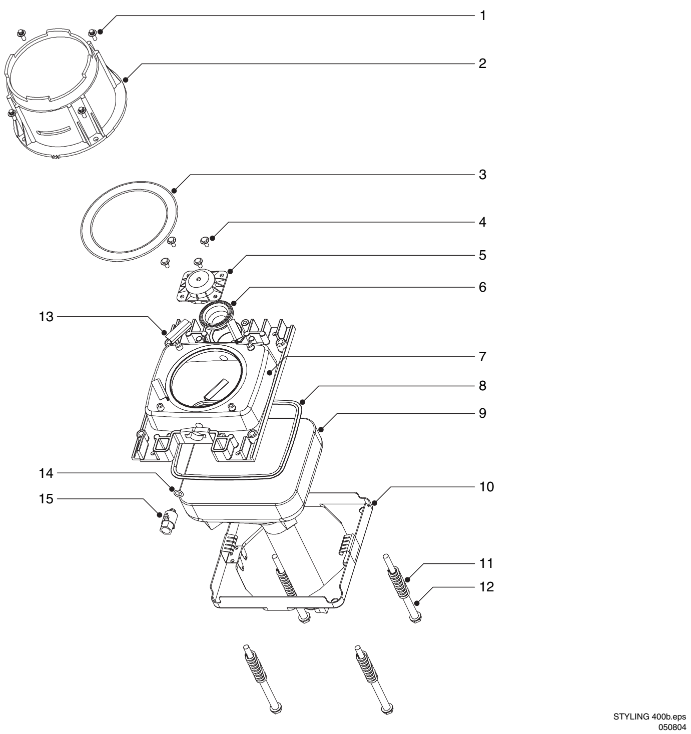
Personal Notes:

E_06532_012.eps
131004

STYLING 400a



STYLING 400b



1	3135 034 01381	Rear cover
1elm*	3135 033 00321	Rear cover
1i*	3135 014 10133	Rear cover
2	3135 037 51751	Rear upper assembly
2efg*	3135 037 72051	Rear upper assembly
3abc*	3135 014 10062	Pip frame
4abcd*	3135 014 10321	SSB support bracket
5	3135 034 01021	Module bracket
6	3135 034 01991	Chassis frame
6i	3135 034 01042	Chassis frame
7	3135 033 01361	Rear barrier
7efg*	3135 033 01031	Rear barrier
8	3135 034 02011	Frame rear jack panel
8hm*	3135 034 02532	Frame rear jack panel
9abc*	3135 037 51241	Front assy
9d*	3135 037 51931	Front assy
9e*	3135 037 52412	Front assy
9f*	3135 037 72111	Front assy
9g*	3135 037 51881	Front assy
9hijk*	3135 037 53971	Front assy
9l*	3135 037 72121	Front assy
9m*	3135 037 53931	Front assy
10abcdh*	3135 011 04611	Mirror mounting bracket
10abcdh*	3141 051 20471	Mirror mounting bracket left
10abcdh*	3141 051 20481	Mirror mounting bracket right
10efg*	3135 034 03461	Mirror mounting bracket
10efg*	3135 034 03451	Mirror mounting bracket
10efg*	3135 034 03491	Mirror mounting bracket
11	3135 010 09741	Foot
12	2422 264 00452	Loudspeaker tweeter
12hijkm*	2422 264 00497	Loudspeaker full range
14	3135 033 20171	Fresnel lens
14e*	3135 033 20181	Fresnel lens
15	3135 033 20141	Lenticural lens
15	3135 033 20061	Lenticural lens
16c*	3135 034 00931	Protection screen
16e*	3135 034 01321	Protection screen
19	3135 034 90081	Mirror
19efg*	3135 034 90051	Mirror
19h*	3135 034 90101	Mirror
22a*	3135 037 51951	Side jack assy
22b*	3135 037 70961	Side jack assy
22efl*	3135 037 70971	Side jack assy
22g*	3135 037 54881	Side jack assy
22h*	3135 037 54861	Side jack assy
22ik*	3135 037 54041	Side jack assy
22jm*	3135 037 10581	Side jack assy
23a*	2422 070 98157	Mains cord UK
23be*	2422 070 98163	Mains cord EU
23eg*	2422 070 98264	Mains cord AUS/NZ
23ehijkm*	2422 070 98154	Mains cord CH
23l*	2422 070 98165	Mains cord Korea
25	2422 264 00453	Loudspeaker woofer
26	3135 037 50981	Button
26d*	3135 037 52061	Button
26efg*	3135 034 00691	Button
27	3135 014 10361	Housing vacation switch
28bh*	3135 034 01452	Screen top and bottom bracket
28c*	3135 034 00941	Screen top and bottom bracket
28ad*	3135 011 04481	Screen top and bottom bracket
28e*	3135 034 01221	Screen top and bottom bracket
28m*	3135 034 04121	Screen top and bottom bracket
29bh*	3135 034 01461	Screen side bracket
29c*	3135 034 00951	Screen side bracket
29ad*	3135 011 04491	Screen side bracket
29e*	3135 034 01271	Screen side bracket
29m*	3135 034 04111	Screen side bracket

Styling 400a (Continued)

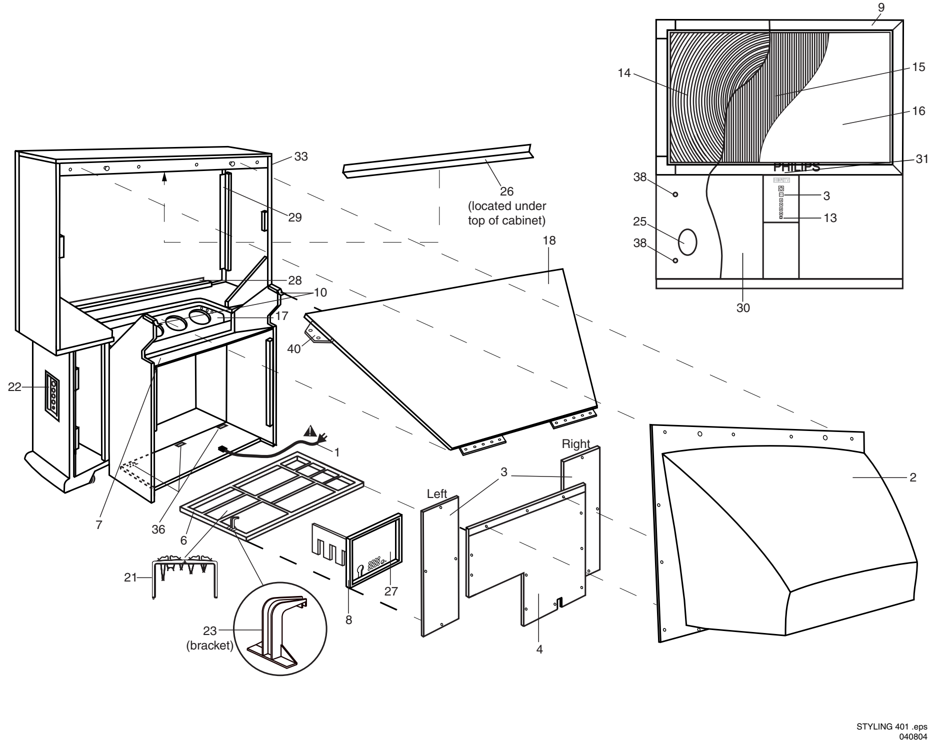
30	3135 037 71561	Grill assy (Baffle assy)
30d*	3135 037 71331	Grill assy (Baffle assy)
30efg*	3135 033 00751	Grill assy (Baffle assy)
30hk*	3135 037 53991	Grill assy (Baffle assy)
30i*	3135 037 53911	Grill assy (Baffle assy)
30j*	3135 037 53981	Grill assy (Baffle assy)
30l*	3135 037 51801	Grill assy (Baffle assy)
30m*	3135 037 53781	Grill assy (Baffle assy)
31	3135 120 01172	Word mark
31efg*	3141 050 00151	Word mark
31h*	4822 459 11228	Word mark
32	3135 013 02761	Baffle mounting cup
33	3135 037 71061	Vacation switch button assy
33efg*	3135 037 71081	Vacation switch button assy
33h*	3135 014 10421	Vacation switch button assy
34	3135 030 00161	Label overlay rear jack panel
34	3135 030 00202	Label overlay rear jack panel -/ 61
34m*	3135 030 00321	Label overlay rear jack panel
	3135 038 70081	Solar cell assy
	9322 173 21682	Projection tube P16LTG00HHA
	9322 173 22682	Projection tube P16LTG00RFA
	9322 173 23682	Projection tube P16LTG00BMB
*hijkm	9322 202 91682	Projection tube P16LXL00RFA
*hijkm	9322 202 92682	Projection tube P16LXL00HHA
*hijkm	9322 202 93682	Projection tube P16LXL00BMB
	9965 000 23140	Convergence template 43” 4/3
elm*	9965 000 20169	Convergence template 46” 16/9

*a	43PP8420/57
*b	43PP8420/69
*c	43PP8320/93
*d	43PP8420/93
*e	46PP8621/57, 46PP8621/69, 46PP8621/79, 46PP8621/93
*f	43PP8621/57, 43PP8421/69
*g	43PP8421/79, 43PP8421/93
*h	43PP8441/93
*i	43PP8442/93
*j	43PP8443/93
*k	43PP8541/93
*l	46PP8621/61
*m	46PP8741/93

Styling 400b

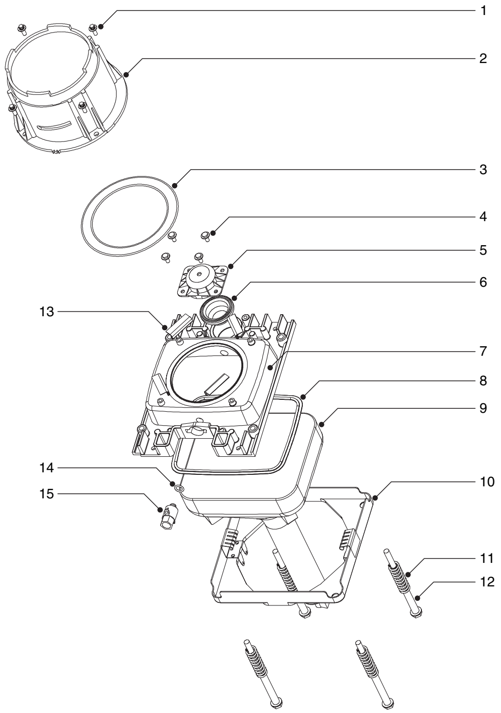
1	3135 010 02971	Screw (lens to coupler)
2	3135 034 00731	Lens C-element green
2	3135 034 00721	Lens C-element red-blue
3	3135 013 02632	Seal lens
4	3135 010 02981	Screw
5	3135 014 02681	Cap coupler
6	4822 418 10413	Expansion diaphragm
7	3135 031 60011	Coupler red-blue
7	3135 031 60021	Coupler green
8	4822 532 13123	Seal CRT
9	9322 173 22682	Picture tube P16LTG00RFA
9	9322 173 21682	Picture tube P16LTG00HHA
9	9322 173 23682	Picture tube P16LTG00BMB
10	3135 011 02371	Bracket CRT
11	4822 492 11733	Spring
12	3135 010 08101	Screw
13	3135 014 02811	CRT pad
14	4822 530 10519	O-ring
15	4835 432 17791	Plug vent
	4822 310 67032	Cooling fluid

STYLING 401a



1ac*	2422 070 98163	Mains cord EUR
1b*	2422 070 98155	Mains cord AUS/NZ
1de*	2422 070 98154	Mains cord CH
1g*	2422 070 98165	Mains cord Korea
2	3135 037 70991	Back upper cabinet
2dg*	3135 034 00791	Back upper cabinet
2e*	3135 034 02211	Back upper cabinet
3	3135 033 00381	Cabinet back cover end
3d*	3135 033 00951	Cabinet back cover end
3e*	3135 033 00811	Cabinet back cover end
3g*	3135 033 01042	Cabinet back cover end
4	3135 033 00321	Cabinet back cover centre
4e*	3135 033 00801	Cabinet back cover centre
5	3135 037 50971	Front control housing
6	3135 034 01991	Chassis frame
7	3135 013 03721	Centre barrier for UL
8	3135 034 01033	Frame rear jack
8c*	3135 034 02011	Frame rear jack
8de*	3135 037 02532	Frame rear jack
8g*	3135 034 02542	Frame rear jack
9ac*	3135 037 70921	Screen frame assy
9b*	3135 037 71401	Screen frame assy
9d*	3135 034 00781	Screen frame assy
9e*	3135 037 53951	Screen frame assy
9f*	3135 037 72321	Screen frame assy
9g*	3135 037 52511	Screen frame assy
10	3135 011 04751	Mirror bracket
10deg*	3135 011 03003	Mirror bracket
11	3135 034 00691	Button
13	3135 014 10231	Window IR receiver
14	3135 033 20201	Fresnel lens
14e*	3135 033 20191	Fresnel lens
15	3135 033 20081	Lenticular lens
15e*	3135 033 20071	Lenticular lens
16abcg*	3135 034 00922	Protector screen HDR
17	3135 034 00891	Light barrier
18	3135 034 90061	Mirror
18e*	3135 034 90021	Mirror
21	3135 034 02513	Bracket
21g*	3135 034 01022	Bracket
22	3135 035 50731	Side jack panel assy
25	2422 264 00453	Loudspeaker woofer
25e*	2422 264 00497	Loudspeaker
26	3135 011 01623	Rail
26e*	3135 011 03641	Rail
27	3135 030 00161	Label rear jack
27de*	3135 030 00321	Label rear jack
27g*	3135 030 00202	Label rear jack
28	3135 034 01781	Retainer screen horizontal
28d*	3135 034 04081	Retainer screen horizontal
28e*	3135 034 04121	Retainer screen horizontal
28g*	3135 034 03291	Retainer screen horizontal

STYLING 401b



Styling 401a (continued)

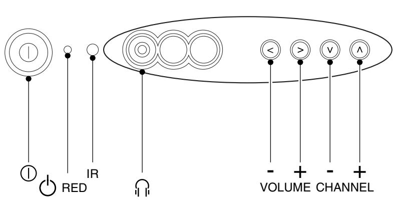
29	3135 034 01791	Retainer screen vertical
29d*	3135 034 04091	Retainer screen vertical
29e*	3135 034 04101	Retainer screen vertical
29g*	3135 034 03311	Retainer screen vertical
30	3135 037 50651	Baffle speaker grill (Baffle assy)
30d*	3135 037 53851	Baffle speaker grill (Baffle assy)
30e*	3135 037 53781	Baffle speaker grill (Baffle assy)
31	3135 050 00151	Word mark
31deg*	3135 030 00471	Word mark
32abcdg*	2422 264 00452	Loudspeaker tweeter
33	3135 037 50692	Cabinet assy
33d*	3135 037 53831	Cabinet assy
33e*	3135 037 53922	Cabinet assy
33g*	3135 037 52425	Cabinet assy
38	3135 013 02761	Baffle mounting cup
40	3135 014 03461	Mirror bracket
40	3135 014 03451	Mirror bracket
40	3135 014 03471	Mirror bracket
	3135 034 00911	Cabinet foot
	3135 014 10062	PIP frame
	3135 014 10361	Housing vacation switch

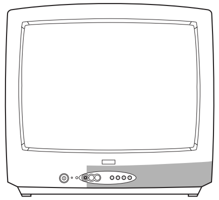
*a	55PP8620/69
*b	55PP8620/79
*c	55PP8620/93
*d	55PP8741/93
*e	50PP8541/93
*f	50PP8421/69
*g	55PP8621/61

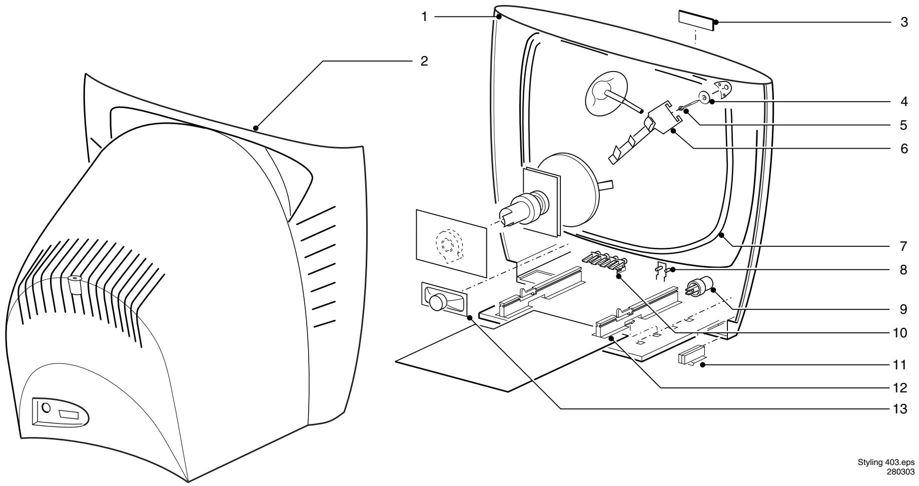
Styling 401b

1	3135 010 02971	Screw (lens to coupler)
2	3135 034 00731	Lens C-element green
2	3135 034 00721	Lens C-element red-blue
3	3135 013 02632	Seal lens
4	3135 010 02981	Screw
5	3135 014 02681	Cap coupler
6	4822 418 10413	Expansion diaphragm
7	3135 011 04271	Coupler red-blue
7	3135 011 04281	Coupler green
8	4822 532 13123	Seal CRT
9	9322 173 22682	Picture tube P16LTG00RFA
9	9322 173 21682	Picture tube P16LTG00HHA
9	9322 173 23682	Picture tube P16LTG00BMB
10	3135 011 02371	Bracket CRT
11	4822 492 11733	Spring
12	3135 010 08101	Screw
13	3135 014 02811	CRT pad
14	4822 530 10519	O-ring
15	4835 432 17791	Plug vent
	4822 310 67032	Cooling fluid

STYLING 403





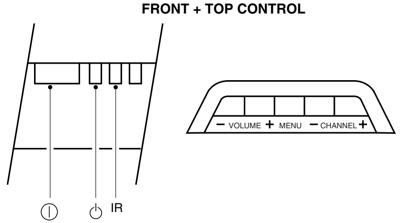


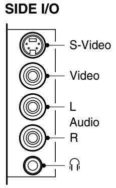
Styling 403.eps
280303

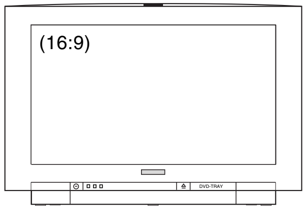
1a*	9051 101 42880	Cabinet
1b*	9051 101 42900	Cabinet
1cd*	9051 122 03050	Cabinet
1e*	9051 101 42930	Cabinet
2a*	9051 101 41600	Rear cover
2b*	9051 001 41830	Rear cover
2cd*	9051 120 07400	Rear cover
3	0134 660 61870	Word mark PHILIPS 14”
3	0134 660 61820	Word mark PHILIPS 20”
4	Not applicable	
5	0156 112 32130	CRT screw 14”
5	0156 112 32140	CRT screw 20”
6	0050 020 00240	Degaussing coil bracket
7	6085 800 03600	Degaussing coil 14”
7	6085 800 03410	Degaussing coil 20”
8	0050 150 23200	Window 14”
8	0050 150 23220	Window 20”
9	9051 182 02680	Mains knob 14”
9cde*	9051 182 02540	Mains knob 20”
10	9051 182 02690	Control knob 14”
10cde*	9051 182 02520	Control knob 20”
11	0054 150 22960	Mains cord relief
12	9051 100 02630	Chassis guide right
12	9051 100 02640	Chassis guide left
13	6103 081 70011	Loudspeaker 16Ω 4W 50x90mm
	0703 621 10151	Picture tube A33EKC02X01
	0705 121 12191	Picture tube A48EKB02X01
	0676 000 02161	Loop antenna 14”
	0676 000 02181	Rod antenna 14”

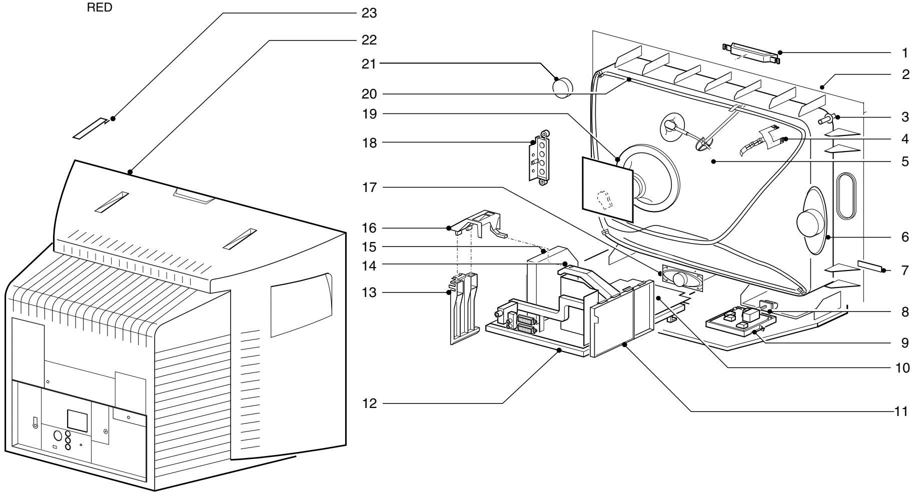
*a	14PT1347/01, 14PT1547/01
*b	14PT1347/05, 37TA1437/03
*c	20PT1547/01
*d	20PT1547/05
*e	37TB1237/19

STYLING 404


FRONT + TOP CONTROL


SIDE I/O



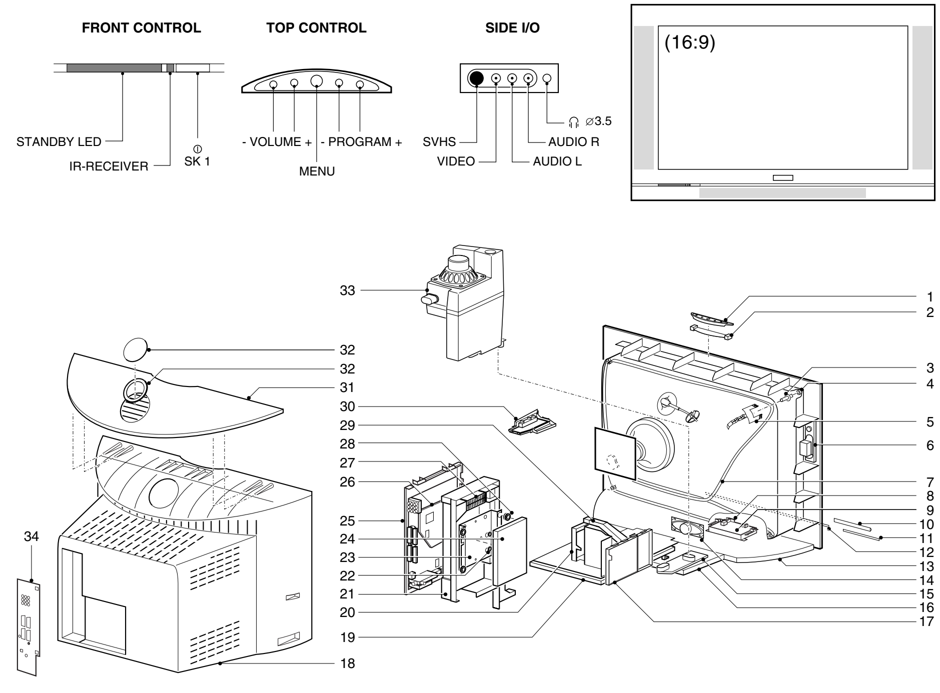


STYLING 404.eps
040804

1	3139 187 22921	Top control assy
2a*	3104 328 23791	Cabinet assy
2b*	3104 328 23921	Cabinet assy
2c*	3104 328 23931	Cabinet assy
3a*	3111 250 40031	CRT screw
3b*	3104 308 74042	CRT screw
4a*c*	4822 404 31289	Bracket fix deg. coil short (2x)
4b*	3104 304 21092	Bracket fix deg. coil short
4a*	4822 403 70906	Bracket fix deg. coil long (2x)
4b*	3104 304 21092	Bracket fix deg. coil short
5a*	9301 895 00306	Picture tube W76ERF052X044
5a*	9301 880 70301	Picture tube W76ERF042X044
5a	9322 173 93682	Picture tube W76EKW 10X73
5b*	3104 300 50301	Picture tube W86LPX955X + yoke
5c*	9301 899 90301	Picture tube W66ERF042X044
6	3139 128 76081	Loudspeaker (Left/Right)
7a*c*	3104 300 12031	Word mark
7b*	3104 300 11991	Word mark
8	3139 177 55091	Mains knob assy
9	3139 124 32521	Front interface bracket
10	3104 304 23041	DAF/DC-shift panel bracket
11	3104 304 23062	Connecting part EMGS
12	3104 304 23001	LSP bracket
13	3104 304 24141	SSB bottom support bracket
14	3104 304 24132	LOT support bracket
15	3104 301 24191	Shielding frame SSB (A-side)
15	3104 301 24201	Shielding frame SSB (Z-side)
15	3104 301 24211	Shielding cover SSB (A-side)
15	3104 301 24221	Shielding cover SSB (Z-side)
16	3104 304 24153	SSB top support bracket
17	3139 128 76581	Loudspeaker (centre)
18	3139 177 25701	Side I/O assy
18	3139 124 32522	Side I/O panel bracket
19	3104 304 21032	Rotation coil bracket
20a*	2422 549 44244	Degaussing coil
20b*	2422 549 44242	Degaussing coil
20c*	2422 549 44621	Degaussing coil
21	3104 304 25691	Cover tweeter hole
22a*	3104 308 10111	Rear cover assy
22b*	3104 308 10141	Rear cover assy
22c*	3104 308 10151	Rear cover assy
23	3139 124 40421	Screw cap rear cover
	4622 009 50491	Mains cord (/05)
	4822 321 11499	Mains cord (/12)
	3104 304 20182	Mains cord holder
	3128 147 14861	Remote control RC2080/01

*a	32PW9308/xxx
*b	36PW9308/xxx
*c	28PW9308/xxx

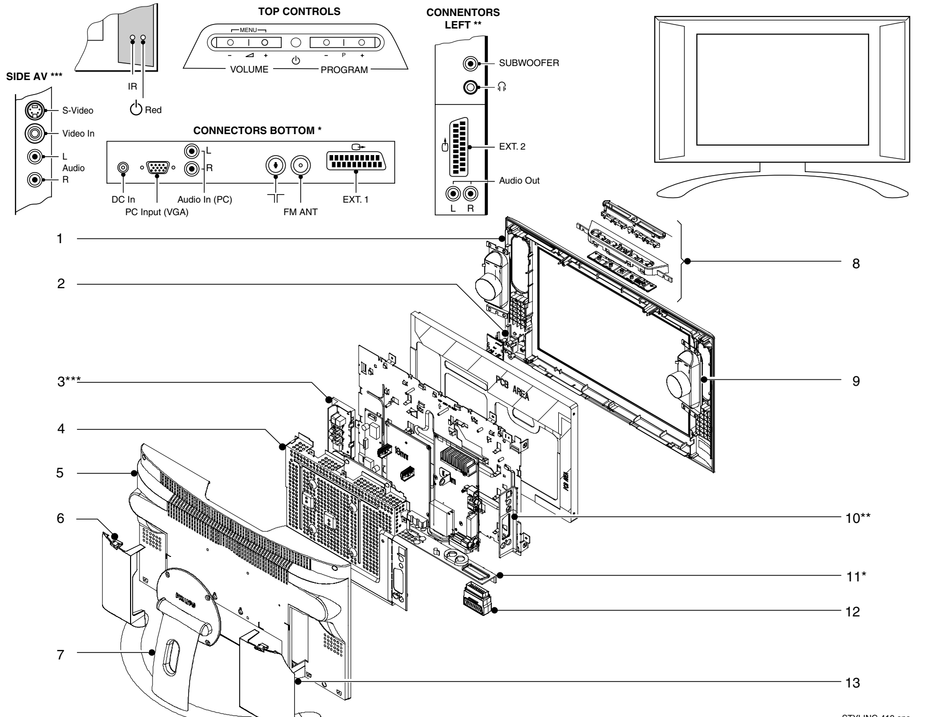
STYLING 406



STYLING 406.eps
040804

1	3104 307 98241	Top control keypad
2	3104 304 23431	Top control bottom
3	4822 404 31294	Insert (VP19000)
4	4822 502 21359	Picture tube screw
5	3104 304 21091	Bracket fix deg. coil short (4x)
6	2422 264 00429	L/R loudspeaker (2x)
7a*c*e*	3104 308 20401	Degaussing coil
7b*	2422 549 44921	Degaussing coil
8	3104 307 97621	Mains switch knob
9	3104 304 23471	Bracket Mains Switch panel
10	3104 304 23461	Light guide
11	3104 304 23621	Deco strip left
12	3104 304 23631	Deco strip right
13a*c*	3104 328 24983	Cabinet assy
13b*	3104 328 24973	Cabinet assy
13d*	3104 328 24992	Cabinet assy
13e*	3104 328 26743	Cabinet assy
14	2422 264 00431	Centre loudspeaker (1x)
15	3104 304 24241	Bracket Subwoofer support
16	3104 304 23501	Bottom plate
17	3104 304 23041	Bracket DAF/DC-shift panel
18a*c*e*	3104 307 99661	Rear cover assy
18b*	3104 308 10041	Rear cover assy
18d*	3104 308 10051	Rear cover assy
19	3104 304 23003	Frame for LSP
20	3104 304 24951	Bracket Auto Scavem
21	3104 304 24982	HD Bracket
22	3104 304 26182	Grommet
23	3104 301 62353	HD Support
24	3104 301 24232	Shielding plate
25	3104 304 24141	Bracket SSB
26	3104 301 24191	Shielding frame SSB (A-side)
26	3104 301 24201	Shielding frame SSB (Z-side)
26	3104 301 24211	Shielding cover SSB (A-side)
26	3104 301 24221	Shielding cover SSB (Z-side)
27	3104 304 25122	rubber fan
27	3104 031 00014	Fan
28	3104 304 25111	Grommet
29	3104 304 24131	Bracket LOT-support
30	3104 328 26751	Side I/O assy
30	3104 304 23481	Side I/O bracket
31-32a*c*e*	3104 307 98642	Top cover assy (incl. disc)
31-32b*	3104 307 98652	Top cover assy (incl. disc)
31-32d*	3104 307 98632	Top cover assy (incl. disc)
32	3104 308 78201	Rubber earring
32	3104 304 24002	Flying saucer
33	3104 130 01981	Subwoofer box
34	3104 304 24951	Cover plate SCART3/wireless
	3104 300 12311	Matchline emblem
	3104 300 12241	Word mark PHILIPS
	3104 304 21032	Bracket Rotation coil
	3128 138 60661	Rotation coil
a*c*e*	9322 173 93682	Picture tube W76EKW10X73
b*	9301 899 90301	Picture tube W66ERF042X044
d*	3104 300 50301	Picture tube W86LPX955X + yoke
	3128 147 14411	Remote control RC4301/01
	4622 009 50491	Mains cord (/05)
	4622 009 50511	Mains cord (/12, /58)
	3104 304 20182	Mains cord holder
*a	32PW9816/xxx	
*b	28PW9618/xxx	
*c	32PW9618/xxx	
*d	36PW9618/xxx	
*e	32PW9768/xxx (HDD)	

STYLING 410

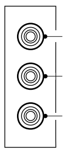


STYLING 410.eps
010403

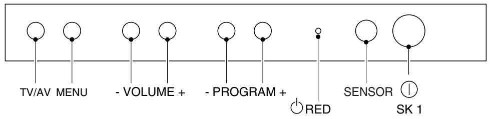
1a*	3111 257 59421	Cabinet 15”
1b*	3111 257 59881	Cabinet 15”
1c*	3111 257 59431	Cabinet 17”
1de*	3111 257 59891	Cabinet 17”
2	3139 124 43391	Light guide (LCD LENS)
3	3139 177 55321	Side AV connector plate
4ace*	3139 121 27281	Main shield
4bd*	3139 121 27631	Main shield
5a*	3111 257 59451	Rear cover 15”
5b*	3111 257 59901	Rear cover 15”
5c*	3111 257 59461	Rear cover 17”
5de*	3111 257 59911	Rear cover 17”
6a*	3139 177 55191	Side connector cover right 15”
6b*	3139 177 69241	Side connector cover right 15”
6ce*	3139 177 55171	Side connector cover right 17”
6d*	3139 177 69271	Side connector cover right 17”
7	3139 128 76731	Stand
8ace*	3139 187 28901	Top control
8bd*	3139 177 74561	Top control
9	2422 264 00465	Loudspeaker 16Ω 10W
10ab*	3139 177 59701	Connector cover left 15”
10cde*	3139 177 55341	Connector cover left 17”
11	3139 177 55331	Bottom connector plate
12	3139 128 76871	Scart adaptor
13a*	3139 177 55181	Side connector cover left 15”
13b*	3139 177 69251	Side connector cover left 15”
13c*	3139 177 55161	Side connector cover left 17”
13d*	3139 177 69261	Side connector cover left 17”
	3139 120 01511	Word mark
	3139 128 76811	Voltage adaptor AC/DC 12V
	3128 147 14871	Remote control RC19042008/01
	9322 187 14682	TFT-LCD screen 15“ / LC151X01-C3P1
	9322 196 31682	TFT-LCD screen 15“ / LC150X01-A3
	9322 187 15682	TFT-LCD screen 17” / LM171W01-B3
	9322 196 32682	TFT-LCD screen 17” / LC171W03-A4
*a	15PF9936, 15HF9936	
*b	15PF9936/xxl	
*c	17PF9945	
*d	17PF9945/xxl	
*e	17HF9945	

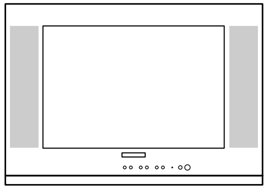
STYLING 413

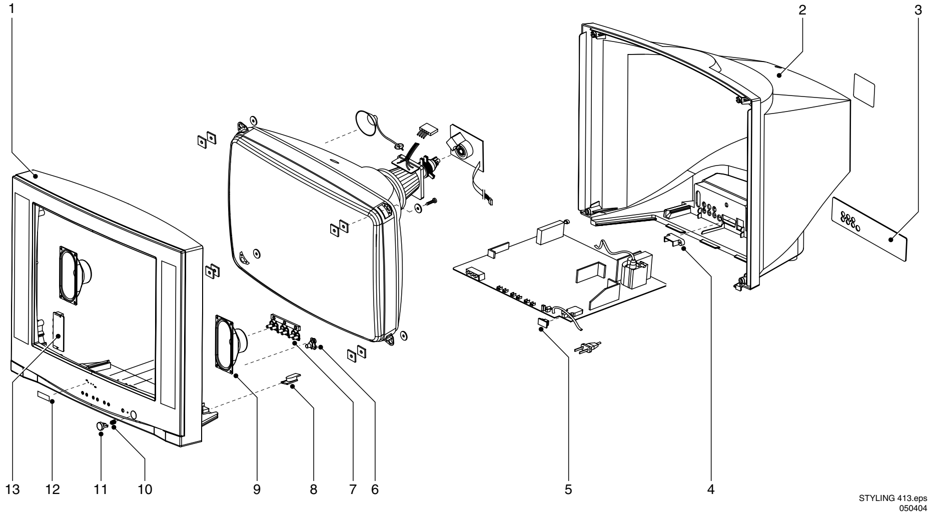
SIDE I/O



FRONT CONTROL





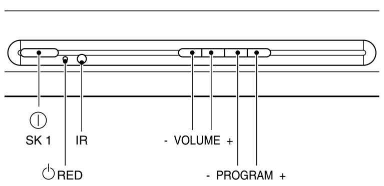


1a*	9965 000 14946	Cabinet
1b*	9965 000 23466	Cabinet
1c*	9965 000 17925	Cabinet
1d*	9965 000 15425	Cabinet
1e*	9965 000 23500	Cabinet
1f*	9965 000 17978	Cabinet
2a*	9965 000 14906	Rear cover
2b*	9965 000 15205	Rear cover
2c*	9965 000 17935	Rear cover
2d*	9965 000 15400	Rear cover
2e*	9965 000 17960	Rear cover
2f*	9965 000 17986	Rear cover
3b*	9965 000 23472	Inlay rear AV
3e*	9965 000 23504	Inlay rear AV
5acd*	9965 000 14951	Adapter for mains switch
5be*	9965 000 23470	Adapter for mains switch
5f*	9965 000 17919	Adapter for mains switch
7a*	9965 000 14946	Control knobs
7bc*	9965 000 17930	Control knobs
7d*	9965 000 15429	Control knobs
7ef*	9965 000 17982	Control knobs
9ab*	9965 000 14941	Loudspeaker 16Ω 5W 50x90mm
9c*	9965 000 17928	Loudspeaker 16Ω 3W 50x90mm
9df*	9965 000 15421	Loudspeaker 8Ω 6W 50x120mm
9e*	9965 000 23499	Loudspeaker 16Ω 5W 50x120mm
10ac*	9965 000 14953	Spring for mains knob
10b*	9965 000 23468	Spring for mains knob
10df*	9965 000 15435	Spring for mains knob
10e*	9965 000 23502	Spring for mains knob
11a*	9965 000 14949	Mains knob
11bc*	9965 000 17931	Mains knob
11d*	9965 000 15431	Mains knob
11ef*	9965 000 17984	Mains knob
12abc*	9965 000 17933	PHILIPS emblem
12def*	9965 000 17985	PHILIPS emblem
acdf*	9965 000 14950	Holder mains cord
be*	9965 000 23469	Holder mains cord
abc*	9965 000 14948	Window
d*	9965 000 15430	Window
ef*	9965 000 17983	Window
-	9965 000 15210	FBT supporter
ac*	9965 000 14942	Picture tube 37SX110Y22-DC05
b*	9965 000 23471	Picture tube A34KPU02XXE6-N
df*	9965 000 17980	Picture tube A51JSY63X13
e*	9965 000 23503	Picture tube A51QAE320XA5
a*	9965 000 14940	Degaussing coil 14”
bc*	9965 000 17927	Degaussing coil 14”
d*	9965 000 15420	Degaussing coil 21”
ef*	9965 000 17979	Degaussing coil 21”
a*	9965 000 14904	Side AV assy
b*	9965 000 23474	Side AV assy
-	9965 000 23467	Inlay side AV
c*	9965 000 17921	Side AV assy
d*	9965 000 15395	Side AV assy
e*	9965 000 23506	Side AV assy
f*	9965 000 17976	Side AV assy

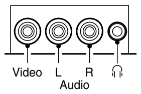
*a	14PT2010
*b	14PT2014
*c	14PT2110
*d	21PT2010
*e	21PT2014
*f	21PT2110

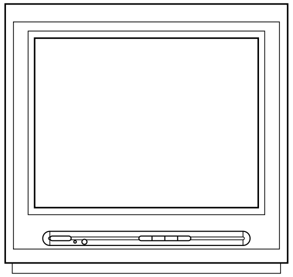
STYLING 420

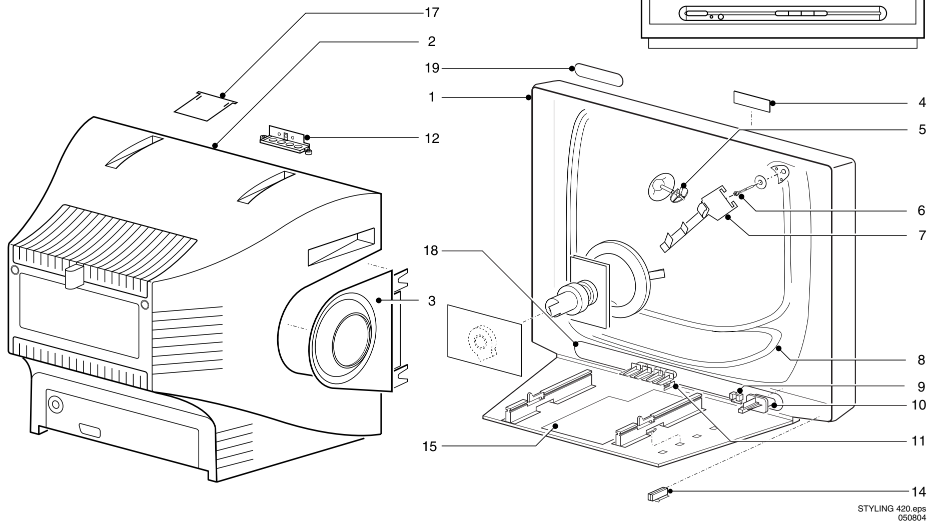
FRONT CONTROL



SIDE I/O



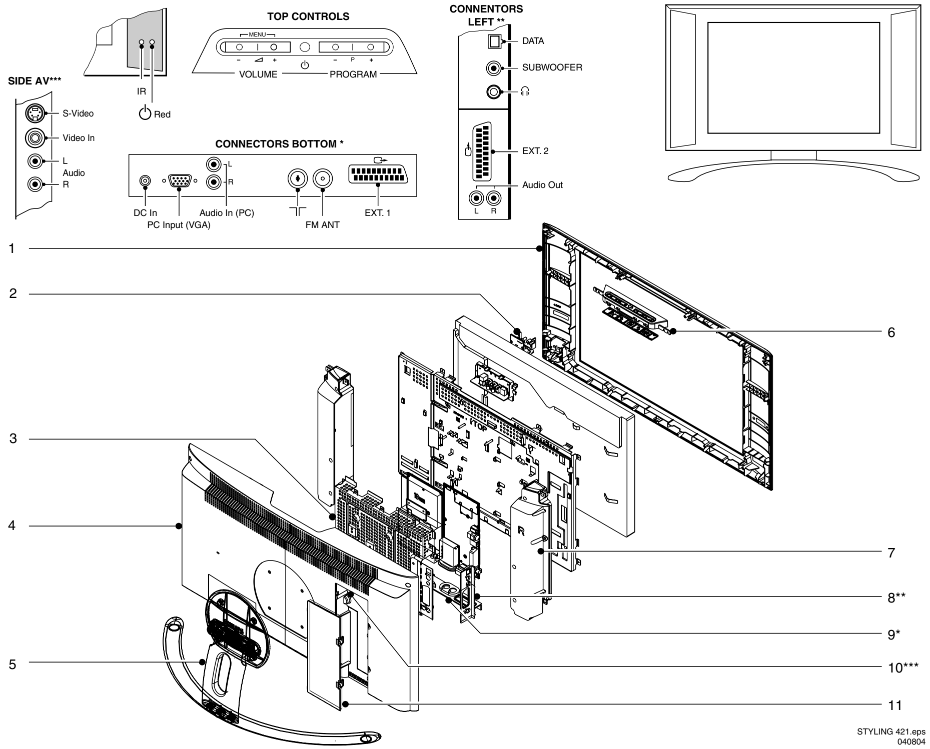




1a*	3111 257 59831	Cabinet 15" silver
1b*	3111 257 59821	Cabinet 15" blue
1cd*	3139 177 56661	Cabinet 21"
1e*	3139 177 63491	Cabinet 21" hotel
1f*	3127 104 01011	Cabinet 21”
2a*	3111 257 59871	Rear cover 15" silver
2b*	3111 257 59861	Rear cover 15" blue
2c*	3111 257 59591	Rear cover 21" (1 Scart)
2d*	3111 257 59621	Rear cover 21" (2 Scart)
2e*	3111 257 59631	Rear cover 21" (hotel)
2f*	3127 107 50031	Rear cover 21”
3a*	3139 177 71621	Speaker bracket silver
3b*	3139 177 71541	Speaker bracket blue
3c*	3139 177 56741	Speaker bracket 21"
3f*	3139 124 44291	Speaker bracket 21”
3ab*	2422 264 00407	Loudspeaker 16Ω 8W
3c*	2422 264 00414	Loudspeaker 8Ω 8W 21"
3def*	2422 264 00398	Loudspeaker 16Ω 5W 21"
4a*	3139 120 01641	Word mark
4b*	3139 120 01631	Word mark
4cdef*	3111 250 01001	Word mark silver frost 21"
5ab*	3111 254 23481	EHT clamp 15"
5cdef*	3111 254 23481	EHT clamp 21"
6	3139 120 41471	CRT fixing screw
6	3138 101 63952	CRT mounting washer
7ab*	3119 104 18247	Degaussing coil bracket 15"
7cde*	3139 124 33472	Degaussing coil bracket 21"
8ab*	2422 549 44844	Degaussing coil 15"
8cde*	2422 549 44669	Degaussing coil 21"
8f*	2422 549 45514	Degaussing coil 21”
9ab*	3139 124 47031	Light guide 15"
9cde*	3139 124 44271	Light guide 21"
10ab*	3139 177 69981	Mains knob 15"
10cdef*	3139 177 56621	Mains knob 21"
11ab*	3139 177 69991	Control knobs 15"
11cdef*	3139 177 56631	Control knobs
12cdef*	3139 124 44371	Side AV bracket (stereo)
12a*	3139 124 47221	Side AV bracket
12b*	3139 124 47211	Side AV bracket
13	3139 124 34092	Chassis guide (right)
14	3104 304 14765	Mains cord holder
15	3139 124 33341	VO plate
17	3139 124 39161	PV2 TOP V0 PLATE
18a*	3139 177 71561	Front lens
18b*	3139 177 71551	Front lens
19e*	313917763481	Clock lens
	3138 101 66552	CRT plate
ab*	9322 191 16682	Picture tube 15" A36AKJ15X07
cf*	9301 923 50342	Picture tube 21" A51ERF135X12
	3111 257 56161	Rod antenna
	2422 070 98089	Mains cord EU

*a	15PT2967/xxS	*d21PT5457
*b	15PT2967/xxB	*e21HT5504
*c	21PT1967	*f21PT5409/01

STYLING 421

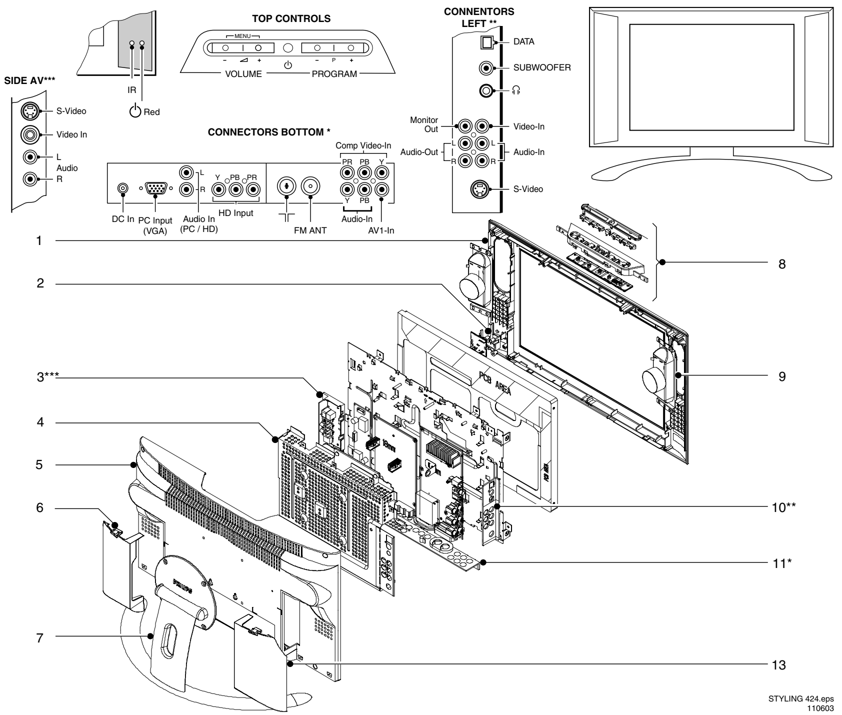

TOP CONTROLS
CONNENTORS LEFT **
SIDE AV***
IR
Red
MENU
VOLUME
PROGRAM
DATA
SUBWOOFER
S-Video
Video In
L
Audio
R
CONNECTORS BOTTOM *
L
R
EXT. 2
Audio Out
DC In
PC Input (VGA)
Audio In (PC)
FM ANT
EXT. 1
1
2
3
4
5
6
7
8**
9*
10***
11

STYLING 421.eps
040804

1	3111 257 59441	Cabinet 23”
1b*	3139 177 60881	Cabinet 23”
2	3139 124 43391	Light guide
3	3139 121 27281	Main shield
3b*	3139 121 28002	Main shield
4	3111 257 59471	Rear cover 23”
4b*	3139 177 53791	Rear cover 23”
5	3139 128 76741	Stand
6	3139 177 81421	Top control
7	3139 128 76781	Loudspeaker left
7	3139 128 76791	Loudspeaker right
7b*	3139 128 76782	Speaker assy left
7b*	3139 128 76791	Speaker assy right
8	3139 177 55341	Connector cover left
9a*	3139 177 64441	Bottom connector plate
10	3139 177 55321	Side AV connector plate
11	3139 177 55141	Connector cover
	3139 128 76871	Scart adaptor
	3139 120 01561	Word mark
	3139 128 76771	Voltage adaptor AC/DC 24V
	3128 147 14871	Remote control RC19042008/01
	9322 194 30682	TFT-LCD screen LC230W01
b*	9322 207 27682	TFT-LCD screen QD23WI04

*a	23PF9945/12/58
*b	23PF9945/12A

STYLING 424


TOP CONTROLS
CONNENTORS LEFT **
SIDE AV***
IR
Red
MENU
VOLUME
PROGRAM
P
DATA
SUBWOOFER
Monitor Out
Video-In
Audio-Out
Audio-In
L
R
S-Video
S-Video
Video In
L
Audio
R
CONNECTORS BOTTOM *
Comp Video-In
PR
PB
Y
DC In
PC Input (VGA)
Audio In (PC / HD)
HD Input
FM ANT
Audio-In
AV1-In
1
2
3***
4
5
6
7
8
9
10**
11*
13

STYLING 424.eps
110603

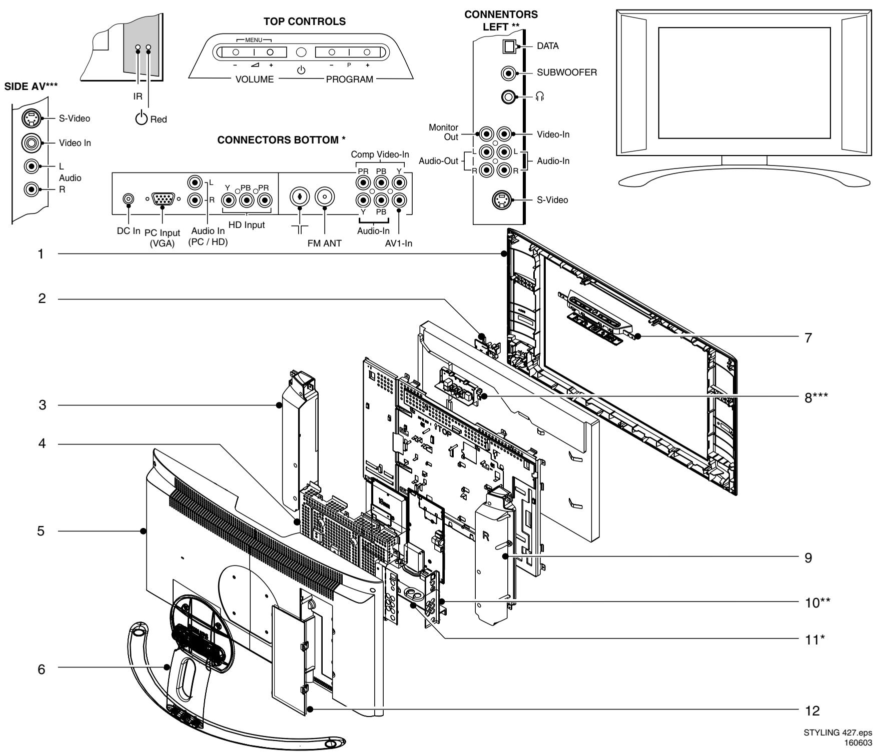
1a*	3139 177 60901	Front cabinet 15” (/69)
1a*	3139 177 69301	Front cabinet 15” (/69I)
1ad*	3139 177 52761	Front cabinet 15” (/61, /37 & /78) – TN LCD panel
1a*	3139 177 75351	Front cabinet 15” (/61I, /69S & /61S)
1ad*	3139 177 70781	Front cabinet 15” (/37 & /78) – IPS LCD panel
1e*	3139 177 69931	Front cabinet 15” (/35)
1b*	3139 177 60891	Front cabinet 17” (/69 & /69I)
1bcf*	3139 177 69921	Front cabinet 17” (/37, /69S, /61S & / 61I)
1b*	3139 177 52911	Front cabinet 17” (/61 & /78)
1g*	3141 047 69731	Front cabinet 17” (/37)
2	3139 124 43391	Light guide
3	3139 177 55321	Side AV bracket
5ade*	3139 177 52811	Rear cover 15” (/37, /69 & /61) – TN LCD panel
5ad*	3139 177 69291	Rear cover 15” (/69I, 61I, /69S, /61S & /37) – IPS LCD panel
5bcf*	3139 177 52881	Rear cover 17” (/37, /69 & /61) – TN LCD panel
5bcg*	3139 177 69281	Rear cover 17” (/69I, 61I, 69S, 61S & / 37) – IPS PCD panel
6ade*	3139 177 55191	Side connector cover 15” Right (/37, / 69, /61 & /78) – TN LCD panel
6ad*	3139 177 69241	Side connector cover 15” Right (/37, / 69I, /61I, /69S, /61S & /78) – IPS LCD panel
6bcf*	3139 177 55171	Side connector cover 17” Right (/37, / 69, /61 & /78) TN LCD panel
6bc*	3139 177 69271	Side connector cover 17” Right (/37, / 69I, /61I, /69S, /61S & /78) IPS LCD panel
6e*	3139 177 55321	Side connector cover 15” Right (/35)
7	3139 128 76731	Metal stand
7g*	3139 128 77161	Metal stand
8	3139 177 74571	Top control
8g*	3139 188 51511	Top control
9	2422 264 00465	Loudspeaker 16Ω 10W
10	3139 177 55311	AV connector plate (TV board)
10ef*	3139 177 55321	AV connector plate (TV board)
11	3139 177 75971	Bottom connector plate
11ef*	3139 177 55471	Bottom connector plate
13ad*	3139 177 55181	Side connector cover 15” Left (/37, / 69, /61 & /78) TN LCD panel
13ad*	3139 177 69251	Side connector cover 15” Left (/37, / 69I, /61I, /69S, /61S & /78) IPS LCD panel
13e*	3139 177 55161	Side connector cover 15” Left (/35)
13bcf*	3139 177 55161	Side connector cover 17” Left (/37, / 69, /61 & /78) – TN LCD panel
13bcg*	3139 177 69261	Side connector cover 17” Left (/37, / 69I, /61I, /69S, /61S & /78) IPS LCD panel
ade*	9322 187 14682	LCD panel LC151X01-C3P1 (15” TN type)
ad*	9322 196 31682	LCD panel LC151X01-A3 (15” IPS type)
bcf*	9322 187 15682	LCD panel LM171W01-B3 (17” TN type)
bcg*	9322 196 32682	LCD panel LC171W03-A4 (17” IPS type)
	3139 120 01511	Word mark PHILIPS (15”/17”)
	3139 128 76811	AC/DC voltage adaptor 12V
	3128 147 14881	Remote control RC19042009/01 (/69)
	3139 238 03811	Remote control RC19041006/01 (/61, /35, /37 & /78)
	4822 303 50063	FM Radio antenna (/69)
	3139 131 02781	FM Radio antenna (/61, /35, /37 & / 78)
	2422 076 00527	TV antenna cable IEC (/69)
	2422 076 00526	TV antenna cable F-pin (/61, /35, /37 & /78)

*a	15PF9936
*b	17PF9945,
*c	17PF9936
*d	15PF9945
*e	15FT9955
*f	17FW9955

Note:

17HF9945There are two types of LCD panel used in **NAFTA** & **Latam** that the type nos. are the same. Therefore, in order to identify which type no is using which LCD panel, look at the production code of the set (normal pasted behind of rear-coverBZ00 or SV00 then it is using TN-type. If not,).*g17PF8946A then IPS-type is used

STYLING 427

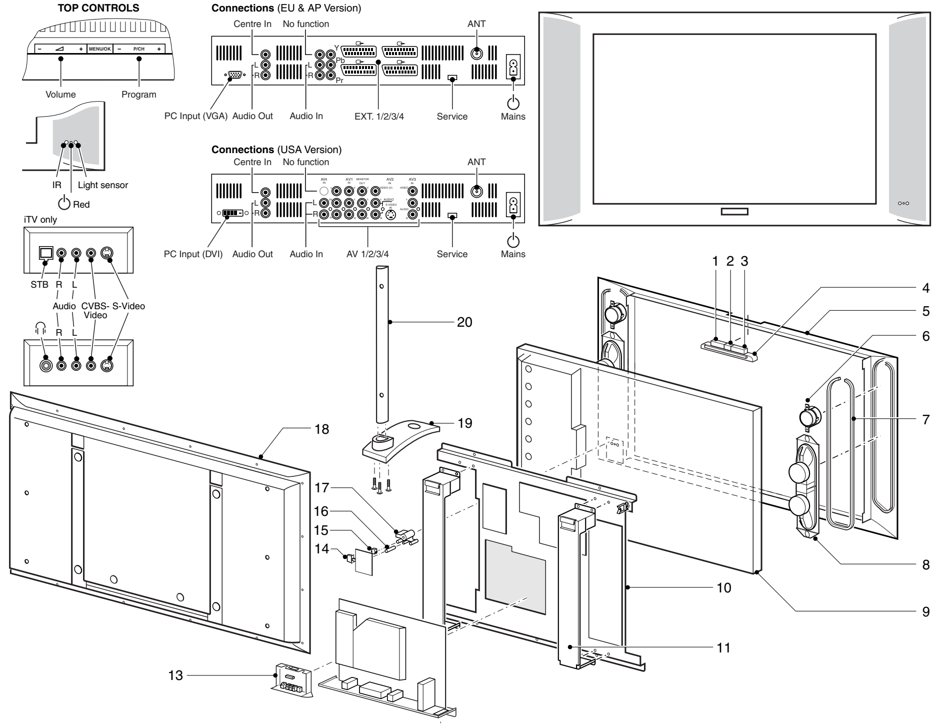

SIDE AV***
S-Video
Video In
L
Audio
R
IR
Red
TOP CONTROLS
MENU
VOLUME
PROGRAM
P
CONNECTORS BOTTOM *
DC In
PC Input (VGA)
Audio In (PC / HD)
HD Input
Y
PB
PR
L
R
FM ANT
Comp Video-In
Audio-In
AV1-In
CONNENTORS LEFT **
DATA
SUBWOOFER
Monitor Out
Video-In
Audio-Out
Audio-In
S-Video
1
2
3
4
5
6
7
8***
9
10**
11*
12

STYLING 427.eps
160603

1ab*	3139 177 60881	Front cabinet 23” (/69)
1acd*	3139 177 53801	Front cabinet 23” (/61, /35, /37, /69S)
2	3139 124 43391	Light guide
3	3139 128 76781	Speaker box Left
5	3139 177 53791	Rear cover 23”
6	3139 128 76741	Metal stand 23”
6d*	3139 128 77151	Metal stand 23”
7	3139 177 74571	Top control assy
8	3139 177 55321	Side AV bracket
9	3139 128 76791	Speaker box Right
10	3139 177 55311	AV connector plate (TV board)
11	3139 177 75971	Bottom connector plate
12	3139 177 55141	Rear AV cover
	9322 194 30682	LCD panel LC230W01 – IPS type
	3139 120 01561	Word mark PHILIPS
d*	Not applicable	Word mark
	3139 128 76771	AC/DC voltage adaptor 24V (caution: not compatible for 15” & 17”)
	3128 147 14881	Remote control RC19042009/01 (/69)
acd*	3139 238 03811	Remote control RC19041006/01 (/61, /35, /37)
	4822 303 50063	FM Radio antenna (/69)
acd*	3139 131 02781	FM Radio antenna (/61, /35, /37 & /78)
	2422 076 00527	TV antenna cable IEC (/69)

acd*	2422 076 00526	TV antenna cable F-pin /61, /35, /37 & /78)
b*	2422 070 98262	Mains cord
cd*	2422 070 98223	Mains cord
*a	23PF9945	
*b	23HF9945	
*c	23FW9955	
*d	23PF8946A	

STYLING 429


TOP CONTROLS
MENU/OK
P/CH
Volume
Program
IR
Light sensor
Red
iTV only
STB
R
L
Audio
CVBS-Video
S-Video
Connections (EU & AP Version)
Centre In
No function
ANT
Y
Pb
Pr
L
R
PC Input (VGA)
Audio Out
Audio In
EXT. 1/2/3/4
Service
Mains
Connections (USA Version)
AV4 IN
AV1 IN
MONITOR OUT
AV2 IN
AV3 IN
PC Input (DVI)
AV 1/2/3/4
1
2
3
4
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11
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14
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19
20

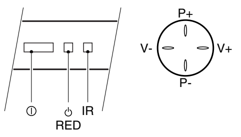
STYLING 429.eps
141003

1	3104 308 10551	Knob right (program)
2	3104 308 10571	Knob middle (menu)
3	3104 308 10561	Knob left (volume)
4	3104 304 25831	Frame top control
5abceh	3104 328 26183	Front assy
5dfi*	3104 328 26192	Front assy
5g*	3104 328 31041	Front assy
6	2422 264 00432	Loudspeaker tweeter
7	3104 303 10791	Loudspeaker foam
8	3104 308 78431	Loudspeaker 8Ω 15W full range
9	9322 198 00682	TFT-LCD Panel LC300W01-A3P7
9g*	9322 206 49682	TFT-LCD Panel T296XW01
10	3104 328 27531	Chassis frame
11	3104 308 10621	Wall mount bracket
12	3104 311 06181	Mains inlet
13abceh*	3104 308 10671	Bracket side I/O
13dfi*	3104 308 11401	Bracket side I/O
14	3122 128 13901	Mains knob
14dhi*	3104 308 11271	Mains knob
15	3122 124 36081	Day light filter
16	3122 124 36271	LED light guide cover
17	3122 124 36071	Lens system
18	3104 308 10521	Rear cover
19	3104 308 11141	Stand foot
20	3104 308 11151	Stand profile
	3122 128 13701	Wall mount bracket
abd*	3104 328 28001	Mounting kit

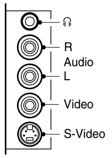
cfi*	3104 328 28012	Mounting kit
bde*	2422 070 98251	Mains cord
ad*	2422 070 98259	Mains cord
chi*	2422 070 98208	Mains cord
ed*	2422 070 98146	Mains cord
ed*	2422 070 98148	Mains cord
	3104 301 24221	Cover Z-side HDH EU
	3104 301 24461	Cover A-side low SSB
	3104 301 24201	Frame Z-side HDH
	3104 301 24451	Frame A-side low SSB
	3104 301 24471	Frame Z-side VGA EPLD LCD
	3128 147 14411	Remote control RC4301/01
	3128 147 14461	Remote control RC4305/01
*a	30PF9975/12	
*b	30PF9975/05	
*c	30PF9975/17	
*d	30HF9975/12, 30HF9975/12Z, 30HF9975/69	
*e	30PF9975/69	
*f	30FW9975/35	
*g	30PF9975/12A	
*h	30PF9975/77, 30PF9975/78	
*i	30FW9955/35	

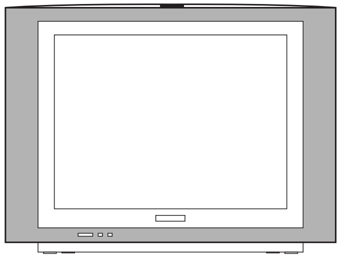
STYLING 432

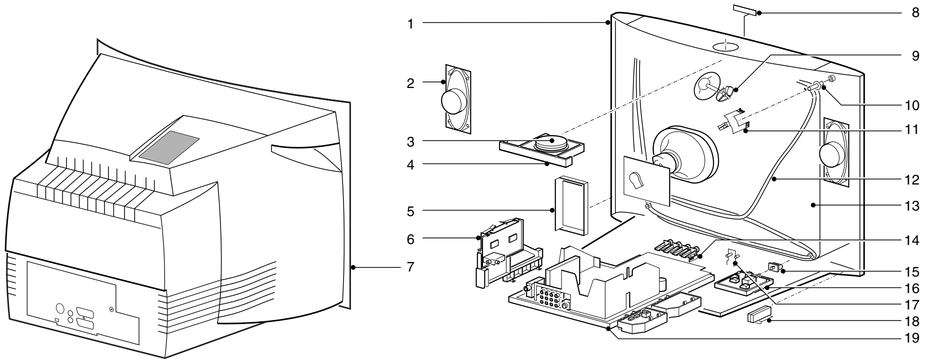
FRONT + TOP CONTROL



SIDE I/O







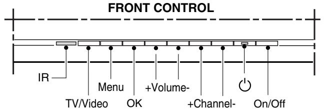
Styling 432.eps
250603

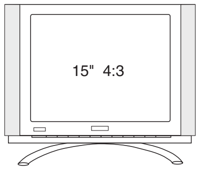
1acde*	3141 047 66001	Cabinet 29”
1bi*	3141 057 65231	Cabinet 29”
1fgh*	3141 047 66361	Cabinet 34"
1j*	3141 047 80831	Cabinet 34"
1k*	3141 047 82981	Cabinet 34"
1lm*	3141 047 83131	Cabinet 29"
2abcdeilm*	2422 264 00379	Loudspeaker 8Ω 10W
2fgh*	2422 264 00444	Loudspeaker 8Ω 10W
2j*	2422 264 00485	Loudspeaker 8Ω 15W
3	3139 137 66921	Top control button
4	3139 124 30381	Top control bracket
5lm*	3139 124 39541	Side AV bracket
5jk*	3139 124 60491	Side AV bracket (3P+HP+SV)
6	Not applicable	
7abcde*	3139 124 37231	Rear cover 29"
7fgh*	3139 124 44831	Rear cover 34"
7i*	3141 057 65241	Rear cover 29”
7j*	3139 124 60511	Rear cover 34”
7lm*	3141 047 65241	Rear cover 29”
8acde*	3141 050 00361	Word mark
8bi*	3141 050 00291	Word mark
8fgh*	Not applicable	Word mark
8j*	3141 050 00281	Word mark
9abcdelm*	3141 054 22011	EHT spacer
9fghi*	4822 532 61201	EHT spacer
10	4822 502 14602	CRT fixing screw
11fgh*	3141 054 22351	Corner coil bracket
11abcdeijklm*	Not applicable	
12abcdilm*	3139 128 23781	Degaussing coil 29"
12e*	4822 157 11551	Degaussing coil 29"
12fgh*	3139 128 23821	Degaussing coil 34"
12jk*	3104 308 20581	Degaussing coil 34"
13abei*	9322 173 75682	Picture tube A68QCP893X001
13cd*	9322 196 06682	Picture tube A68QDL281X062
13fj*	9301 927 10542	Picture tube A80ERF042X14
13gh*	9301 927 30542	Picture tube A80ERF042X15
13k*	9301 953 10542	Picture tube A80ERF142X14
13lm*	9322 215 00682	Picture tube A68QCP693X001
14	Not applicable	
15abcdeijklm*	3139 138 14831	Mains knob
15fgh*	3139 124 30401	Mains knob
16	3139 124 30431	Front interface bracket
17abcdejklm*	3139 124 30411	Light guide
17fgh*	Not applicable	
18	4822 404 31363	Main cord relief
19	3139 124 33531	Chassis tray
abclm*	3139 128 75211	Mains cord
dh*	3139 128 75291	Mains cord
e*	3139 128 75230	Mains cord
fg*	2422 070 98199	Mains cord

*a	29PT4323/69S/56R
*b	29PT5307/60
*c	29PT4323/69R
*d	29PT4323/71R
*e	29PT4323/79R
*f	34PT4323/56R
*g	34PT4323/69R
*h	34PT4323/71R
*I	29PT5307/60S
*j	34PT3224/93R
*k	34PT3225/93
*l	29PT4325/69
*m	29PT4326/69

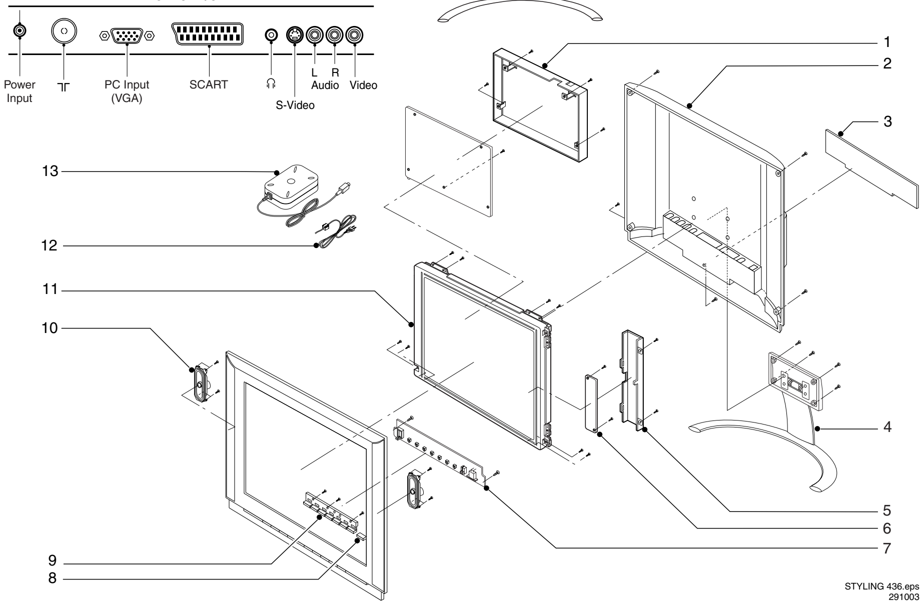
STYLING 436

FRONT CONTROL





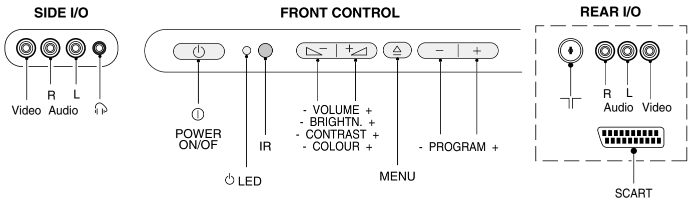
BOTTOM I/O

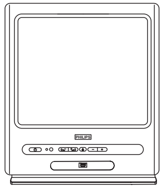


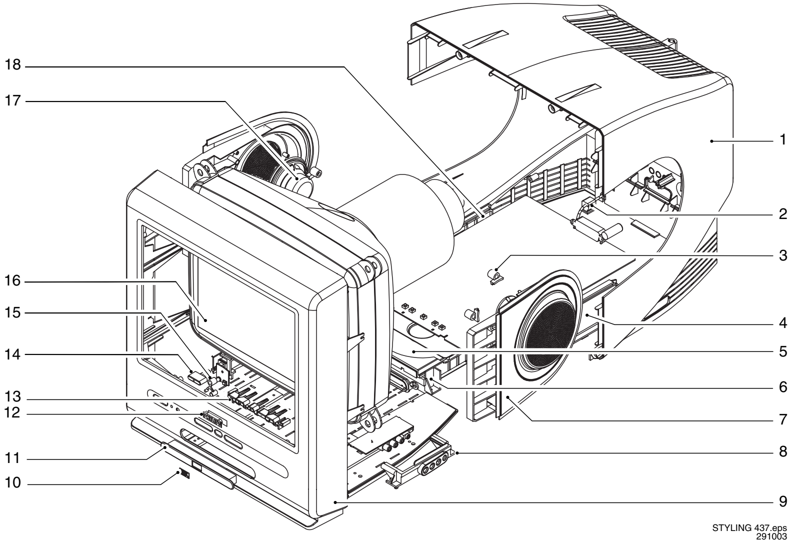
STYLING 436.eps
291003

1	9965 000 16423	Shielding cover
2	9965 000 16420	Rear cover
3	9965 000 16421	Cover rear A/V
4	9965 000 16516	Stand
5	9965 000 16426	Shield for inverter
6	9965 000 16425	Inverter for LC151X01-A3 panel
6	9965 000 17796	Inverter for LC151X01-C3P1 panel
7	9965 000 16424	Front control panel
8	9965 000 16419	Mains knob
9	9965 000 16417	Control knob assy
10	9965 000 16411	Loudspeaker
11	9965 000 16410	LC151X01-A3
11	9965 000 16743	LC151X01-C3P1
12	9965 000 14327	Mains cord
13	9965 000 16428	Adapter

STYLING 437


SIDE I/O
Video
R
L
Audio
FRONT CONTROL
POWER
ON/OF
LED
IR
- VOLUME +
- BRIGHTN. +
- CONTRAST +
- COLOUR +
MENU
- PROGRAM +
REAR I/O
R
L
Audio
Video
SCART




18
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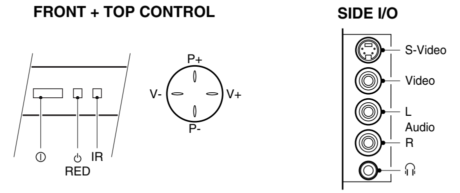
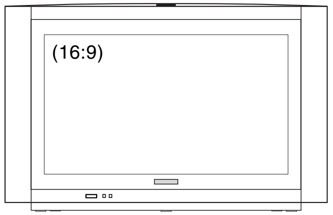
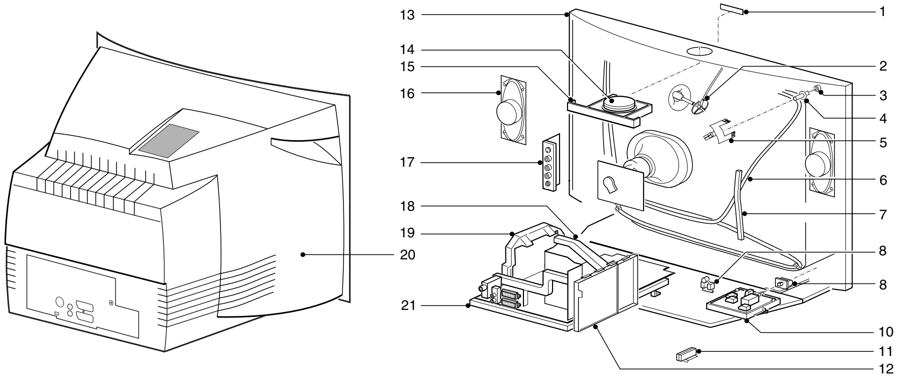
STYLING 437.eps
291003

1	9051 101 51000	Rear cover
2	0054 150 20240	Mains cord relief
3	9051 120 07090	Holder for loudspeaker small
4	9051 100 02820	Chassis holder left
5	8411 400 15100	DVD loader
6	3990 000 02111	DVD mechanism
7	9051 020 07100	Holder for loudspeaker large
8	9051 130 08050	AV holder
9	9051 001 52000	Cabinet
10	0134 660 64370	Philips emblem DVD
11	9051 010 07230	DVD cover
12	0134 660 64360	Philips emblem
13	0051 170 00230	Knob assy
14	9051 082 02880	Mains knob
15	0050 150 23300	LED guide
16	0703 621 13001	Picture tube A36AKJ13X16
17	6103 081 70001	Loudspeaker
18	9051 100 02810	Chassis holder right

STYLING 439


FRONT + TOP CONTROL
RED
IR
P+
V-
V+
P-
SIDE I/O
S-Video
Video
L
Audio
R




13
14
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16
17
18
19
20
21
1
2
3
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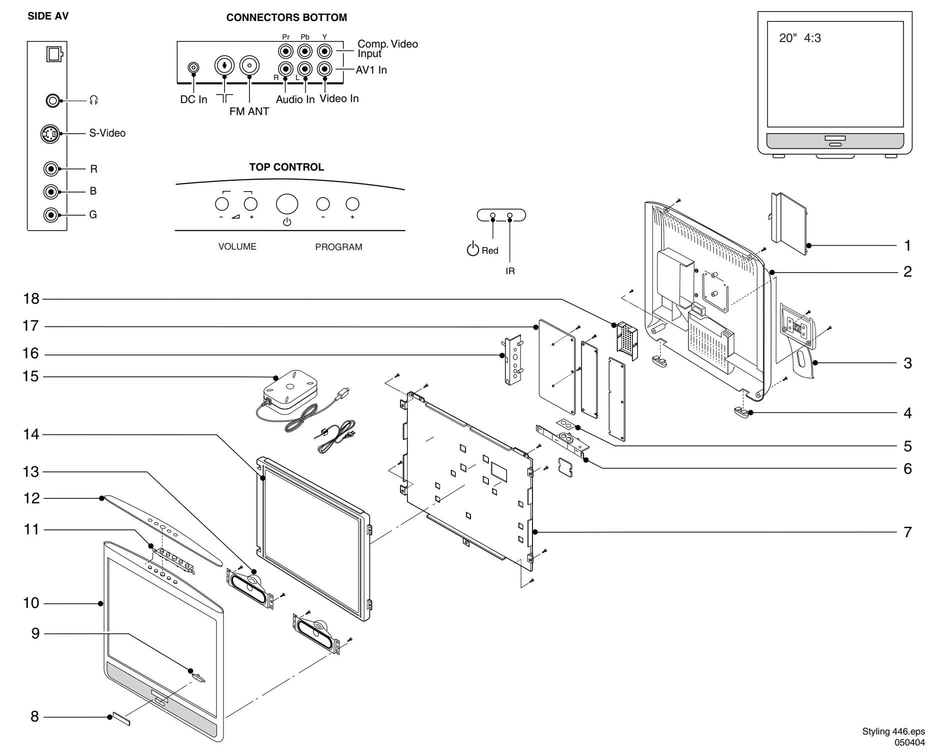
5
6
7
8
8
10
11
12

Styling 439.eps
301003

1b*	3111 250 00811	Word mark 32"
1	4822 454 13455	Word mark 28"
1cd*	3141 050 00291	Word mark 28”
2	3111 254 23481	Coil & THT clamp
3	Not applicable	
4bd*	4822 502 14602	CRT fixing screw 32"
4a*	4822 505 11195	CRT fixing screw 28"
5	4822 403 70906	Fix degaussing coil
5b*	4822 404 31289	Fix degaussing coil 32"
6	2422 549 44244	Degaussing coil 32"
6b*	4822 403 70906	Degaussing coil 28"
6c*	2422 549 44621	Degaussing coil 28”
7	4822 404 31341	Coil clamp
7c*	4822 403 70906	Coil clamp
8	3139 124 33811	Light guide
9	3139 124 33801	Mains knob cover
9	3139 124 33011	Mains knob shaft
10	3139 124 32521	Front interface bracket
10d*	3139 124 30434	Front interface bracket
11ab*	4822 466 11453	Mains cord relief
11c*	4822 401 11795	Mains cord relief
12	3104 304 23041	DAF bracket
13b*	3111 257 59981	Cabinet 32"
13	3111 257 59991	Cabinet 28"
13c*	3143 027 61131	Cabinet 28”
13d*	3143 027 61121	Cabinet 32”
14	3139 137 66921	Top control button
15	3139 124 33941	Top control bracket
16b*	2422 257 20547	Loudspeaker 8Ω 15W
16	3139 128 76202	Loudspeaker 8Ω 10W
16cd*	3139 128 76581	Loudspeaker 8Ω 15W
17	3139 124 31651	Side I/O bracket
17d*	3139 124 31652	Side I/O bracket
18	3104 304 23011	LOT bracket
19ab*	3139 124 46742	SSB bracket
20b*	3111 257 56681	Rear cover 32"
20	3111 257 56671	Rear cover 28"
20c*	3139 124 32101	Rear cover 28”
21	3104 304 23001	LSP bracket
21d*	3104 304 23005	LSP bracket
	9301 899 90301	Picture tube 28” W66ERF042X044
b*	9301 880 70301	Picture tube 32” W76ERF042X044
c*	2422 500 80063	Picture tube 28” W66ERF072X044
d*	9301 921 90314	Picture tube 32” W76ERF072X044
	4822 321 11499	Mains cord
	4822 321 11139	Mains cord
	3128 147 15231	Remote control RC19042011/01
a*	28PW8609	
b*	32PW8609	
c*	28PW8609/12S	
d*	32PW8609/12S	

STYLING 446



Styling 446.eps
050404

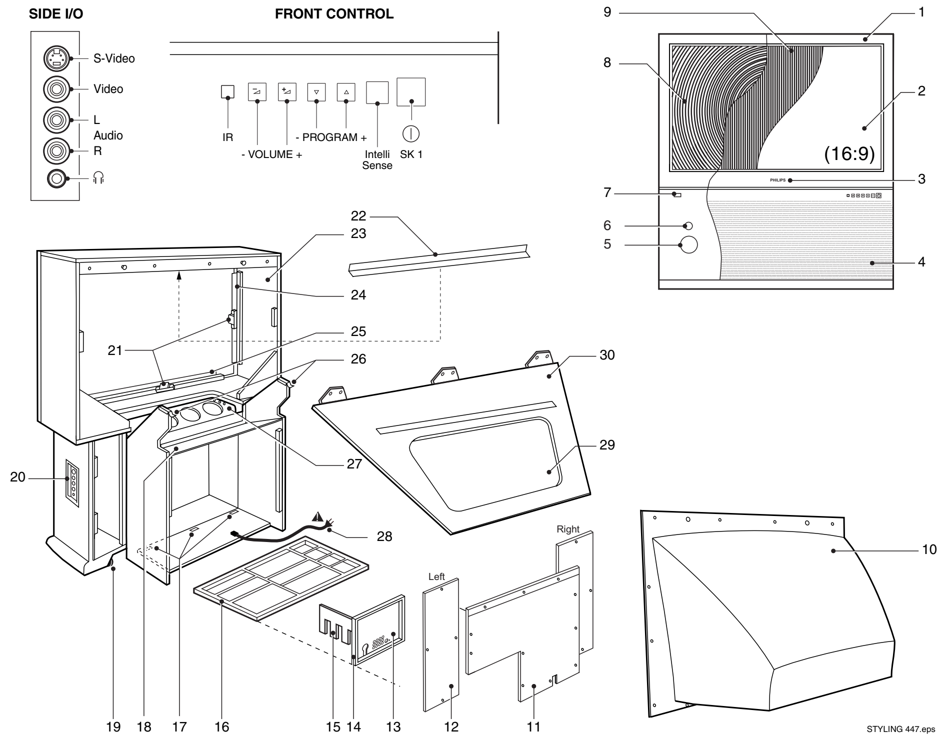
1	3139 124 46181	Side connector cove 20 LCS
1	3139 124 46191	Side connector cove 15 LCS
2	3139 177 67111	Rear cover 20LCS
2	3139 177 67121	Rear cover 15LCS
3	3139 128 76841	Stand 20LCS
3	3139 128 76861	Stand 13/15LCS
4	3139 124 46571	Rubber feet
5	Not applicable	
6	3139 124 47081	Connector plate bottom 20LCS
7	3139 121 27521	Main Meter Frame 20LCS
7	3139 121 27531	Main Meter Frame 15LCS
8	3139 120 01601	Word mark 20LCS
8	3139 120 01611	Word mark 13/15 LCS
9	3139 124 46161	LCD Lens
9	3139 177 72821	LCD lens
10	3139 177 67161	Cabinet 20LCS
10	3139 177 74261	Cabinet 20LCS ITV
10	3139 177 67031	Cabinet 15LCS
11	3139 177 71241	Top control assy 15/20LCS
12	3139 177 69381	Top plate assy 20LCS
12	3139 177 69391	Top plate assy 15LCS
13	2422 264 00444	Loudspeaker 8Ω 10W 20LCS
13	2422 264 00467	Loudspeaker 16Ω 5W 15LCS
13	2422 264 00512	Loudspeaker 4Ω 5W 14
14	9322 197 44682	TFT-LCD LC201V02-A3
14	9322 196 31682	TFT-LCD LC150X01-A3
15	3139 128 76771	Adaptor 24V AC/DC 20LCS
15	3139 128 76971	Adaptor 12V AC/DC 15 LCS
16	3139 124 47071	Connector plate side 15/20LCS
16	3139 124 48291	Connector plate side 15/20LCS ITV
17	Not applicable	
18	3139 121 27651	Bottom shield scaler 15/20LCS
18	3139 121 27511	Top shield scaler
18	3139 121 27671	Tuner shield
	3139 238 05851	Remote control RC19335016/01 AP
	3139 238 05691	Remote control RC19335014/01 Nafta
	3139 238 08141	Remote control RC199335019/01
	4822 303 50063	Aerial (Pal)
	3139 121 27501	Vesa mounting plate

15PF7835/37
20PF7835/37
15PF7835/69S
15PF7835/93
15PF7835/69I
20PF7835/69S
20PF7835/93
20PF7835/69I
15HF7835/69
20HF7835/69

Personal Notes:

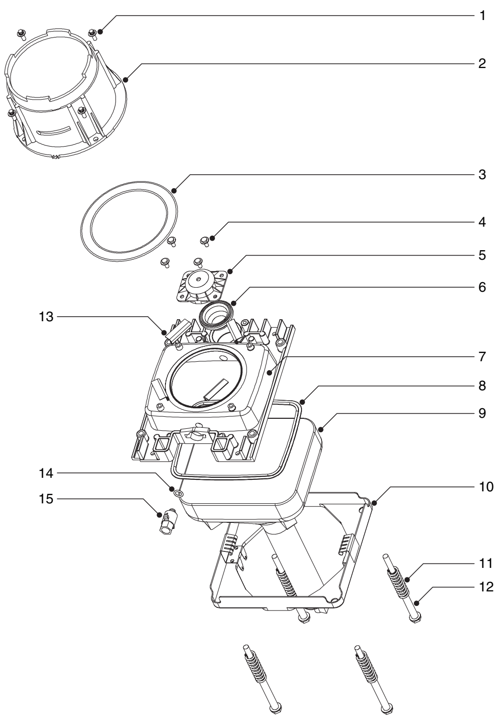
E_06532_012.eps
131004

STYLING 447a



STYLING 447.eps
040205

STYLING 447b



STYLING 447b.eps
040205

1ac*	3135 037 72641	Screen frame
1b*	3135 037 72931	Screen frame
1d*	3135 037 75451	Screen frame
1eg*	3135 037 72631	Screen frame
1f*	3135 037 72921	Screen frame
1h*	3135 037 52791	Screen frame
2	3135 034 01321	Protection screen 46”
2	3135 034 00922	Protection screen 55”
3	3141 050 00151	Word mark
4	3135 037 52452	Cover front 46”
4d*	3135 037 53871	Cover front 46”
4	3135 037 72611	Cover front 55”
4h*	3135 037 53891	Cover front 55”
5	2422 264 00452	Loudspeaker tweeter
6	2422 264 00453	Loudspeaker woofer
7	3135 037 52491	Vacation button
8	3135 033 20181	Fresnel lens 46”
8	3135 033 20201	Fresnel lens 55”
9	3135 033 20061	Lenticular lens 46”
9	3135 033 20081	Lenticular lens 55”
10	3135 037 72051	Rear cover 46”
10	3135 037 70991	Rear cover 55”
11	3135 033 00321	Cover middle
12	3135 033 00961	Speaker cover L+R 46”
12	3135 033 00951	Speaker cover L+R 55”
13	3135 030 00273	Label rear jack
13cg*	3135 030 00302	Label rear jack
13dh*	3135 030 00332	Label rear jack
14	3135 034 02542	Frame rear jack
15	3135 034 10061	PIP frame
16	3135 034 01991	Frame chassis
17	3135 011 02011	Hold down bracket
18	3135 033 01031	Barrier 46”
18	3135 033 01041	Barrier 55”
19	3135 030 40031	Castor
20	3135 037 70971	Side jack assy
21	3135 038 70081	Solar cell assy
23	3135 037 52632	Cabinet 46”
23	3135 037 52623	Cabinet 55”
24	3138 034 03341	Retainer screen vertical 46”
24	3138 034 03311	Retainer screen vertical 55”
24d*	3138 034 04111	Retainer screen vertical 46”
24d*	3138 034 04091	Retainer screen vertical 55”
25	3135 034 03331	Retainer screen horizontal 46”
25d*	3135 034 04121	Retainer screen horizontal 46”
25	3135 034 03291	Retainer screen hor. top 55”
25	3135 034 03291	Retainer screen hor. bottom 55”
25h*	3135 034 04081	Retainer screen horizontal 55”
26	3135 034 03181	Mirror bracket lower
27	3135 034 00891	Light barrier
28	2422 070 98165	Mains cord Korea
28	2422 070 98163	Mains cord EUR
28	2422 070 98264	Mains cord AUS/NZ
28	2422 070 98154	Mains cord CH
29	3135 034 90051	Mirror 46”
29	3135 034 90061	Mirror 55”

Styling 447a (continued)

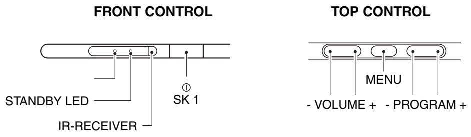
30	3135 033 00461	Mirror board 46”
30	3135 033 00351	Mirror board 55”
	3135 147 13991	RC2049/01B
	3135 147 14011	RC2060/01B
	9322 173 22682	P16LTG00RFA
	9322 173 21682	P16LTG00HHA
	9322 173 23682	P16LTG00BMB
	9322 202 91682	P16LXL00RFA
	9322 202 92682	P16LXL00HHA
	9322 202 93682	P16LXL00BMB

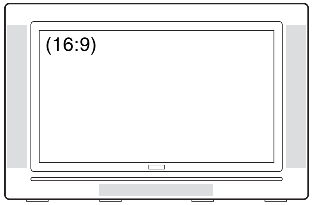
*a	46PP9527/69, 46PP9527/93
*b	46PP9527/79
*c	46PP9527/61
*d	46PP9541/93
*e	55PP9527/69, 55PP8620/93
*f	55PP8620/79
*g	55PP9527/61
*h	55PP9541/93

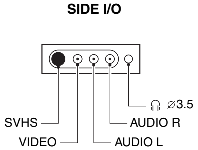
Styling 447b

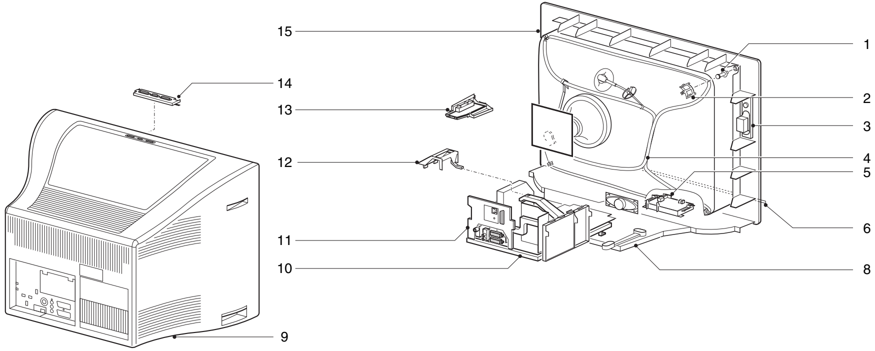
1	3135 010 02971	Screw (lens to coupler)
2	3135 034 00731	Lens C-element green
2	3135 034 00721	Lens C-element red-blue
3	3135 013 02632	Seal lens
4	3135 010 02981	Screw
5	3135 014 02681	Cap coupler
6	4822 418 10413	Expansion diaphragm
7	3135 011 04271	Coupler red-blue
7	3135 031 60021	Coupler green
8	4822 532 13123	Seal CRT
9	9322 173 22682	Picture tube P16LTG00RFA
9	9322 173 21682	Picture tube P16LTG00HHA
9	9322 173 23682	Picture tube P16LTG00BMB
10	3135 011 02371	Bracket CRT
11	4822 492 11733	Spring
12	3135 010 08101	Screw
13	3135 014 02811	CRT pad
14	4822 530 10519	O-ring
15	4835 432 17791	Plug vent
	4822 310 67032	Cooling fluid

STYLING 456


FRONT CONTROL
STANDBY LED
IR-RECEIVER
SK 1
TOP CONTROL
MENU
- VOLUME +
- PROGRAM +




SIDE I/O
∅3.5
SVHS
AUDIO R
VIDEO
AUDIO L


15
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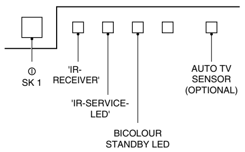
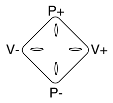
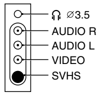
STYLING 456.eps
040205

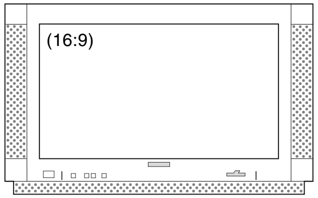
1	4822 505 11195	CRT screw 28”
1	4822 502 14602	CRT screw 32”
2	3111 254 23481	Coil & THT clamp
2	4822 404 31341	Coil clamp
3	3104 308 78721	Loudspeaker 10Ω 12W
4	2422 549 44621	Degaussing coil 28”
4	2422 549 44244	Degaussing coil 32”
5a*	3139 177 75621	Mains knob
5b*	3104 308 11041	Mains Knob
6a*	3139 177 79051	Strip right 28”
6a*	3139 177 77701	Strip right 32”
6b*	3104 308 10951	Strip right 28”
6b*	3104 308 10891	Strip right 32”
9a*	3139 177 79041	Strip left + lens 28”
9a*	3139 177 77711	Strip left + lens 32”
9b*	3104 308 11201	Strip left + lens 28”
9b*	3104 308 11201	Strip left + lens 32”
7	Not applicable	
8	3104 304 23471	Mains bracket
9a*	3104 308 12451	Rear cover 28”
9a*	3104 308 12461	Rear cover 32”
9b*	3104 308 11231	Rear cover 28”
9b*	3104 308 11221	Rear cover 32”
10	3104 304 23001	Bracket for LSP (Chassis frame)
11	3104 304 21314	Cover plate SCART
12	3104 304 24891	LOT support bracket
13	3104 328 30551	Side I/O
14	3104 328 30571	Top control
15a*	3104 328 33011	Cabinet 28” incl. bottom plate
15b*	3104 328 27771	Cabinet 28”
15a*	3104 328 33021	Cabinet 32” incl. bottom plate
15b*	3104 328 27731	Cabinet 32”
-	3104 304 24151	SSB bracket top
-	3104 304 24901	SSB bracket bottom
-	3104 304 23041	DAF Bracket
-	3104 301 24191	Shielding frame SSB A-side
-	3104 301 24201	Shielding frame SSB Z-side
-	3104 301 24211	Shielding SSB A-side
-	3104 301 24221	Shielding SSB Z-side
-	3104 304 21031	Rotation coil 32”
-	3104 304 25712	Corner coil bracket short 28” + 32”
-	3104 304 25722	Corner coil bracket Long 32”
-	3104 304 21091	Corner coil bracket 32”
-	3104 304 25712	Corner coil bracket short 28”
-	3111 250 01041	Word mark 28”
-	3111 250 01051	Word mark 32”
-	9301 899 90301	Picture tube 28” W66ERF042x044
-	9301 967 10306	Picture tube 28” W66ERF172x044
-	9301 924 90314	Picture tube 32” W76ERF062x044
-	9322 173 93682	Picture tube 32” W76EKW10x73
-	4822 321 11425	Mains cord EU
-	4622 007 51622	Mains cord UK
-	4822 402 11183	Mains cord relief
a*	3139 238 07921	Remote control
b*	3128 147 14411	Remote control
*a	xxPW9309/xx	
*b	xxpw9509/xx	

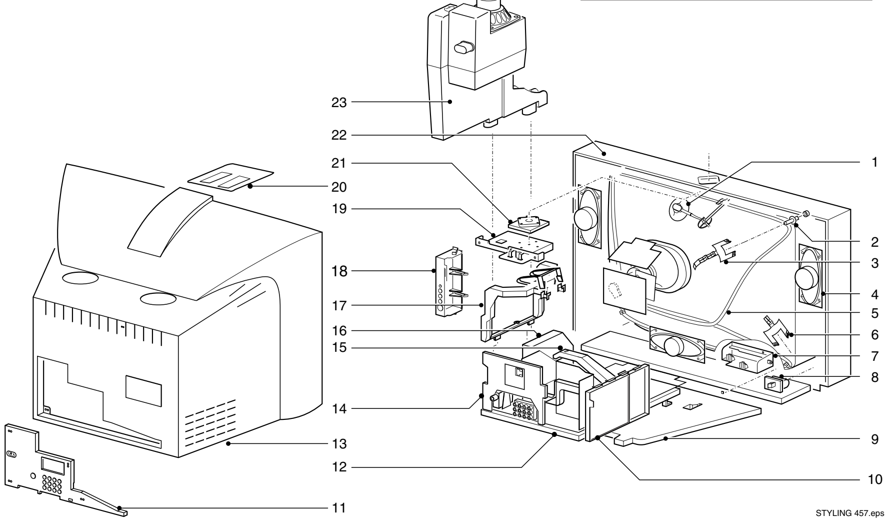
STYLING 457


SK 1
'IR-RECEIVER'
'IR-SERVICE-LED'
BICOLOUR STANDBY LED
AUTO TV SENSOR (OPTIONAL)




∅3.5
AUDIO R
AUDIO L
VIDEO
SVHS




23
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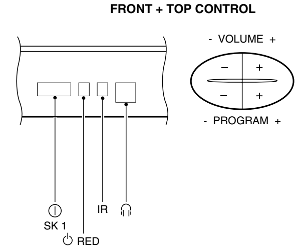
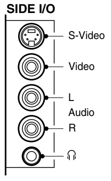
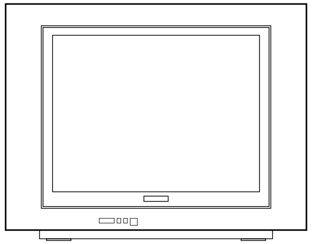
STYLING 457.eps
040804

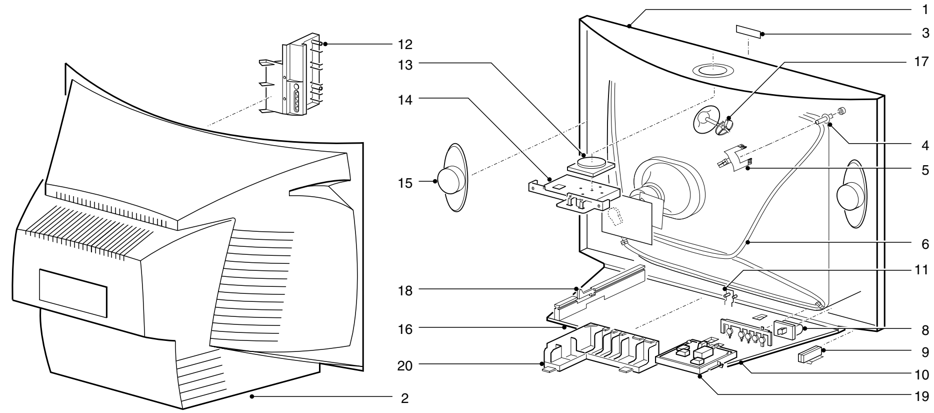
1	4822 532 61201	EHT spacer
2	4822 502 21359	CRT fixing screw
3	3141 054 22351	Cable tie
4	3104 130 01231	Loudspeaker 8Ω 15W
5	3139 128 23861	Degaussing coil 32"
7	4822 402 11176	Mains unit bracket
8	3139 124 45851	Mains knob
9	3104 304 21275	Bottom plate
12	3141 054 22551	Chassis frame
13	3139 124 44801	Rear cover 32"
14	Not applicable	
18	3141 054 22561	Side AV bracket
19	3141 054 22231	Top control bracket
20	3104 304 21081	VO plate
	3141 050 00281	Word mark
	3139 124 46561	Cabinet 32"
	9301 888 30314	Picture tube W76ERF022X013
	3104 304 20801	Light guide
	32PW4523/79R	

STYLING 459


FRONT + TOP CONTROL
- VOLUME +
–
+
–
+
- PROGRAM +
SK 1
RED
IR


SIDE I/O
S-Video
Video
L
Audio
R

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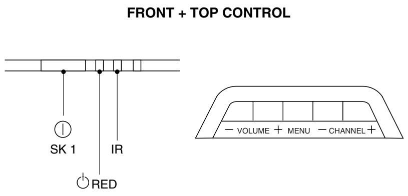
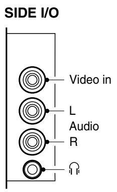
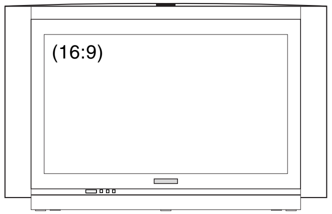
STYLING 459.eps
040804

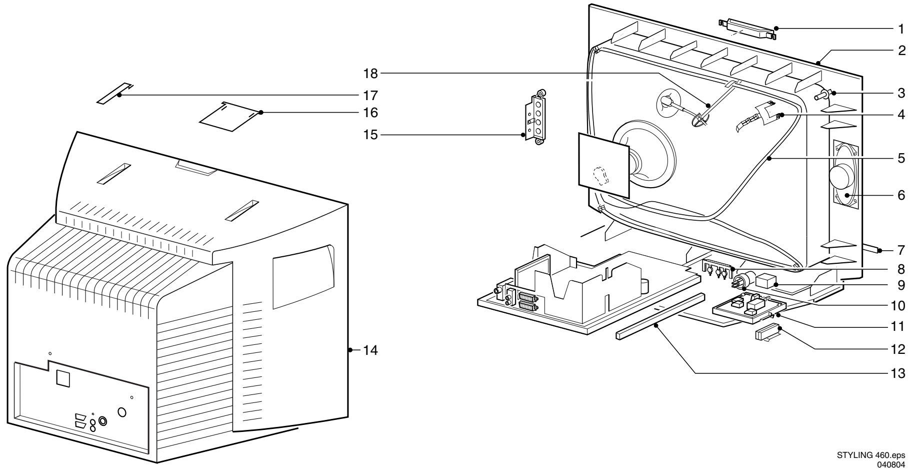
1	3141 047 68001	Cabinet
2	3141 057 69551	Rear cover (12AV+SVHS)
3	3141 050 00301	Word mark
4	4822 505 11195	CRT fixing screw
5	3139 124 17541	Cable tie
6	4822 157 11444	Degaussing coil
7	Not applicable	
8	3141 057 64591	Mains knob
10	3139 124 33341	V0 plate
11	3139 124 32221	Light guide
12	3141 054 22541	Side AV bracket
13	3139 124 31131	Top control cover
14	3139 124 30381	Top control bracket
15	2422 264 00409	Loudspeaker 8Ω 10W
16	Not applicable	
17	3139 124 17541	EHT spacer
	3131 228 86482	Remote control
	3139 124 30811	Chassis guide (VO)
	9322 196 08682	Picture tube A51LSK955X01
	21PT5207/60	

STYLING 460


FRONT + TOP CONTROL
SK 1
IR
RED
– VOLUME + MENU – CHANNEL +


SIDE I/O
Video in
L
Audio
R

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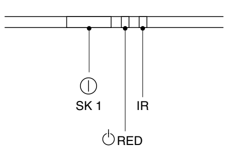
STYLING 460.eps
040804

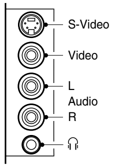
1	3139 187 29861	Top control assy
2	3111 257 60171	Cabinet
3		CRT fixing screw
4	4822 403 70906	Corner coil bracket
5	2422 549 44621	Degaussing coil
6		Speaker assy
7	3111 250 01041	Word mark Philips
8	Not applicable	
9	3139 124 39211	Light guide
10	3139 177 74141	Mains knob
11	3139 124 32521	Front interface bracket
12		Mains cord relief
13	Not applicable	
14	3139 124 42081	Rear cover (no DVD) 28”
15	3139 124 37661	Side AV bracket
16	Not applicable	
17	3139 124 45351	Screw cap
18	3111 254 23481	EHT spacer coil & THT clamp
	4822 321 11499	Mains cord EU
	4822 321 11493	Mains cord UK
18b*	3139 187 28341	Mains cord EU
	9301 888 10301	Picture tube 28” W66ERF022X013
*a	28PW8719/12	
*b	28PW8719/05	

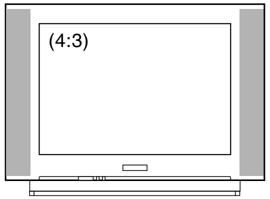
STYLING 461

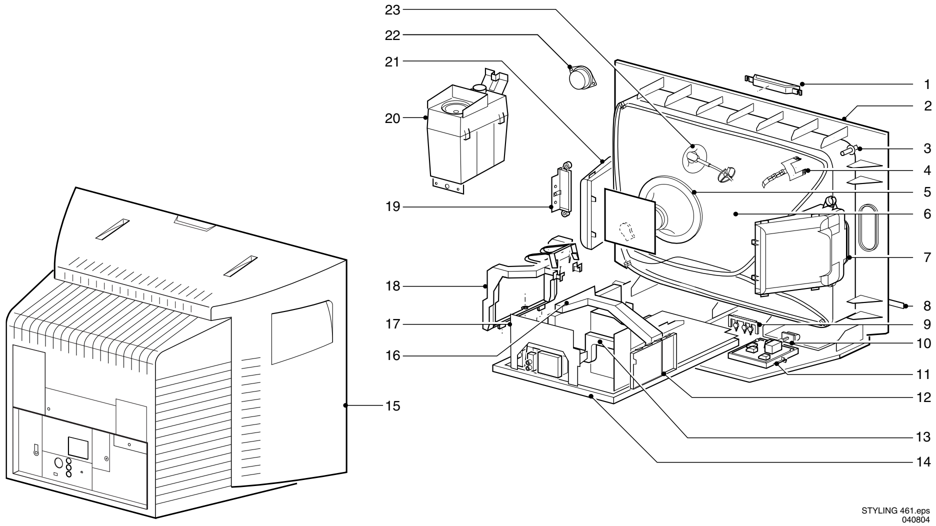
FRONT + TOP CONTROL



SIDE I/O







STYLING 461.eps
040804

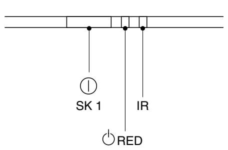
1	3139 187 29861	Top control assy
2	3111 257 60191	Cabinet
3	Not applicable	
4	3104 308 20381	Degaussing coil 29”
5	Not applicable	
6	4822 121 20708	Picture tube W66ESF012X14
		74822 240 20338Loudspeaker
8	4822 459 11154	Plastic plate, indication Philips 12mm
9	4822 466 70798	Light guide
10	4822 321 11499	Mains knob
11	3139 124 32521	Front interface bracket
12	3104 304 23041	DAF & DC shift bracket
13	Not applicable	
14	3104 304 23001	LSP Chassis frame
15	3139 124 41121	Rear cover 29”
16	3139 124 46742	SSB bracket A02
17	3139 177 76931	Cover plate
18	3104 304 23011	LOT bracket EMGS
19	3139 124 31651	Side IO bracket
20	Not applicable	

22	Not applicable	
21	Not applicable	
23	3104 311 03272	EHT cable
		Focus cable (black)
		Focus cable (red)
	3139 238 07441	Remote control

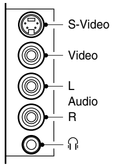
*29PT8609/12

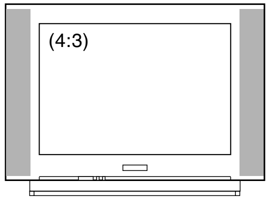
STYLING 463

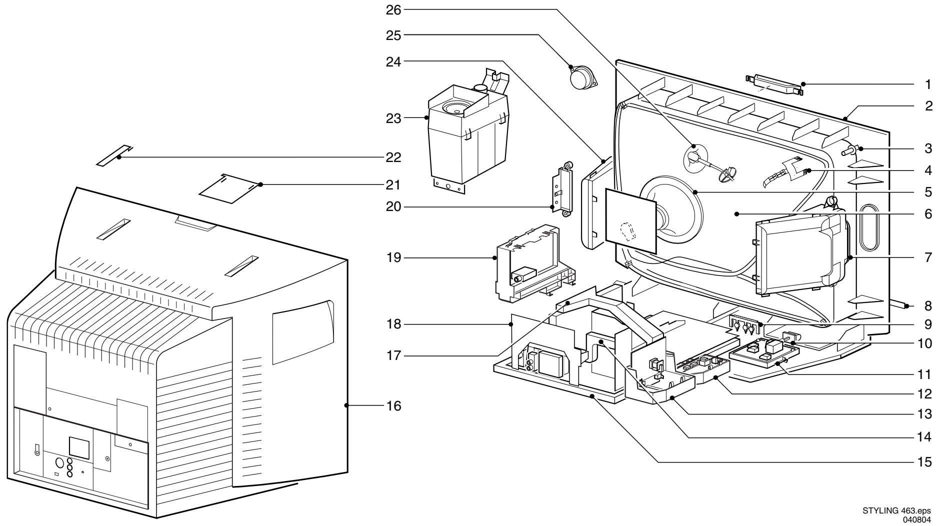
FRONT + TOP CONTROL



SIDE I/O







STYLING 463.eps
040804

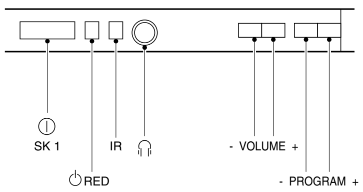
1	3139 188 69231	Top control assy
2	3111 257 60151	Cabinet assy 32”
3	3111 250 40031	CRT screw
4	3111 254 23481	Coil & tht clamp
5	Not applicable	
6	9301 921 90314	Picture tube W76ERF072X044
7	3104 308 78531	Loudspeaker 8Ω 18W
8	Not applicable	
9	3139 187 29871	Front interface
10	3139 177 55091	Mains knob
11	3139 124 32521	Front interface bracket
12	Not applicable	
13	Not applicable	
14	Not applicable	
15	3104 304 23001	LSP chassis frame
16	3111 257 60161	Rear cover 32”
17	3139 124 46742	SSB bracket
18	Not applicable	
19	Not applicable	
20	3139 124 31651	Side IO bracket
21	3139 124 39161	Top VO plate
22	3139 124 40422	Screw cap
23	Not applicable	
24	3104 308 78531	Loudspeaker 8Ω 18W
25	Not applicable	
26	Not applicable	
	3139 238 07441	Remote control
	3141 050 00291	Word mark

3104 304 14414	Bracket for Degaussing coil 32"
3104 304 14713	Bracket for Degaussing coil 32"
2422 549 44621	Degaussing coil
3104 304 14414	Corner coil bracket
3104 304 23041	Bracket for DAF EMGS
3104 304 14765	Mains cord bracket
4822 404 31291	Mains cord
3139 124 40421	Screw cap for A02 32WSEF

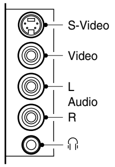
32PW8719/05

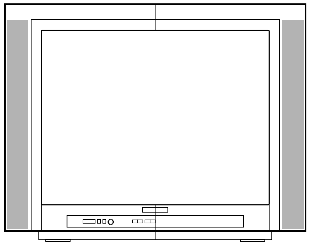
STYLING 464

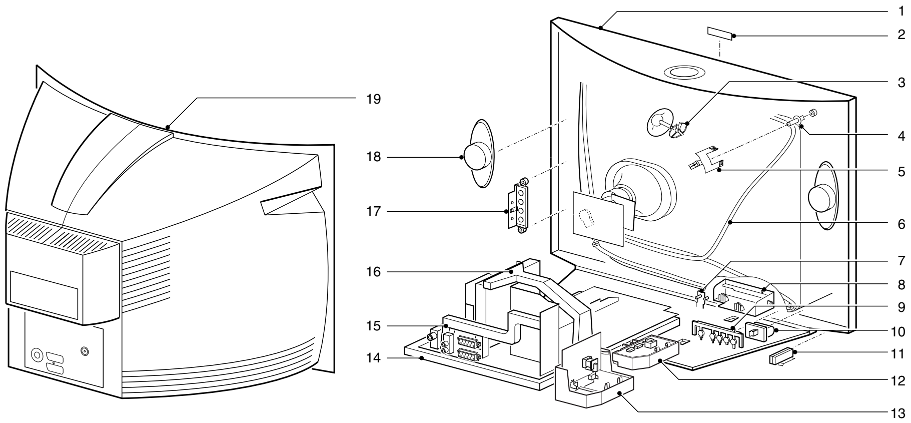
FRONT + TOP CONTROL



SIDE I/O







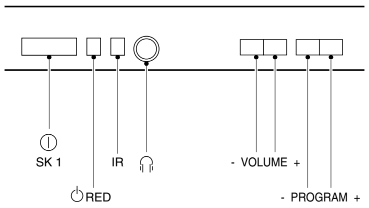
STYLING 464.eps
050804

1	3111 257 60141	Cabinet 28”
1b*	313117784151	Cabinet 28”
2	3141 050 00291	Word mark PHILIPS
3	3111 254 23481	Coil & THT clamp
4	4822 505 11195	CRT fixing screw
5	4822 403 70906	Degaussing coil bracket
6	2422 549 44251	Degaussing coil 28"
7	3139 124 42791	Light guide
8	Not applicable	
9	3139 177 63973	Control knobs
10	3139 177 63981	Mains knob
12	Not applicable	
11	4822 404 31291	Bracket for mains cord
13	Not applicable	
14	3104 304 23005	LSP bracket
15	3104 304 23011	LOT support bracket
16		3139 124 46742SSB bracket
17		Side i/o bracket
18	2422 264 00472	Loudspeaker
19	3139 124 45881	Rear cover 28”
19b*	3139 177 73511	Rear cover 28”
	3128 147 15231	Remote control
	3139 188 69242	Front control
	4622 009 50501	Mains cord EU
	9301 863 10314	Picture tube

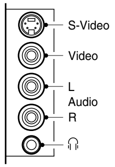
*a	28PT7159/12
*b	28PT7109/12
*c	28PT7129/12
*d	28PT7139/12

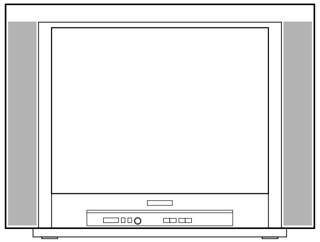
STYLING 465

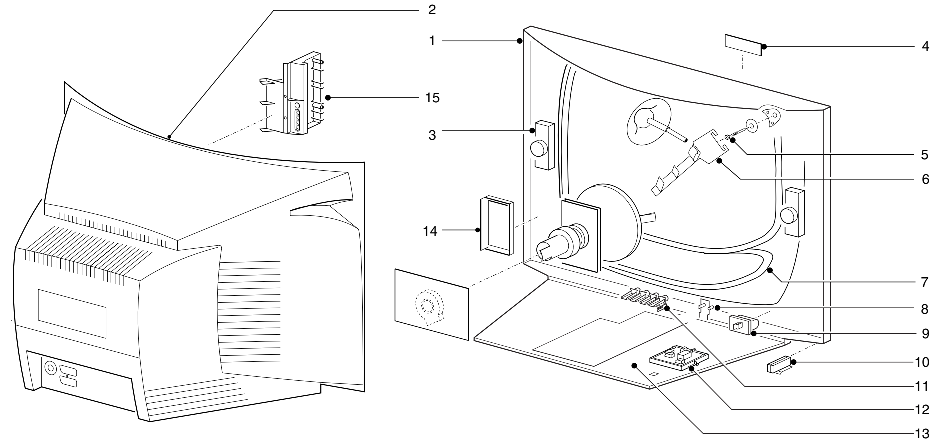
FRONT + TOP CONTROL



SIDE I/O



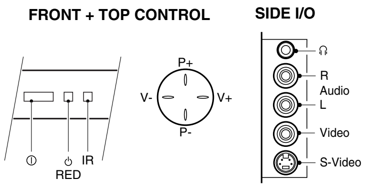


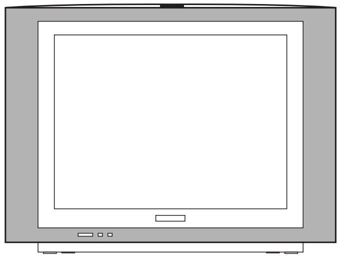


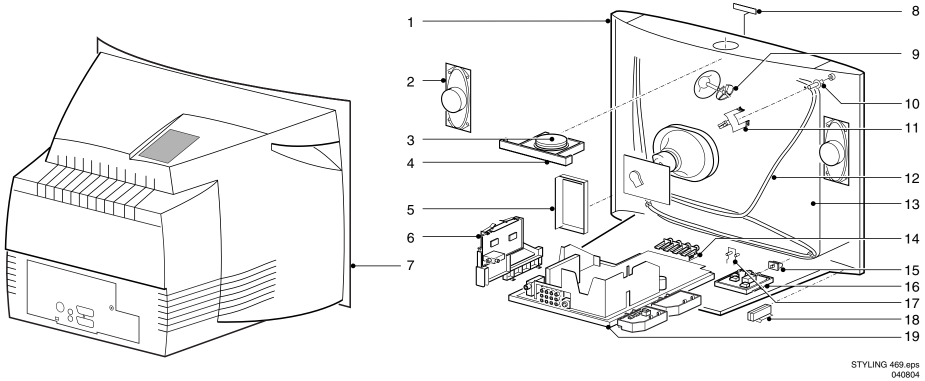
STYLING 465.eps
050804

1	3139 177 65981	Cabinet
2	3139 124 32062	Rear cover
3	2422 264 00409	Loudspeaker 8Ω 5W
4	3141 050 00291	Word mark
5	3104 308 77012	CRT fixing screw
6	3104 304 25712	Corner Bracket tool
7	2442 549 44579	Degaussing coil
8	3139 124 33811	Light guide
9	3139 177 66471	Mains knob
10	Not applicable	
11	3139 177 66481	Control knob
12	Not applicable	
13	3139 124 33811	Chassis tray
14	Not applicable	
15	3139 124 37661	Side AV bracket
	3139 137 22801	Mains cord
	9322 205 17682	Picture tube A68ELA021X201
*	29PT5407/21	

STYLING 469



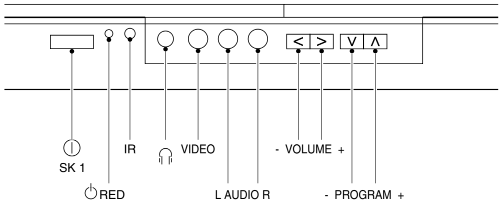


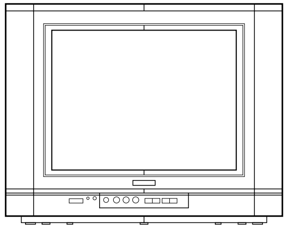


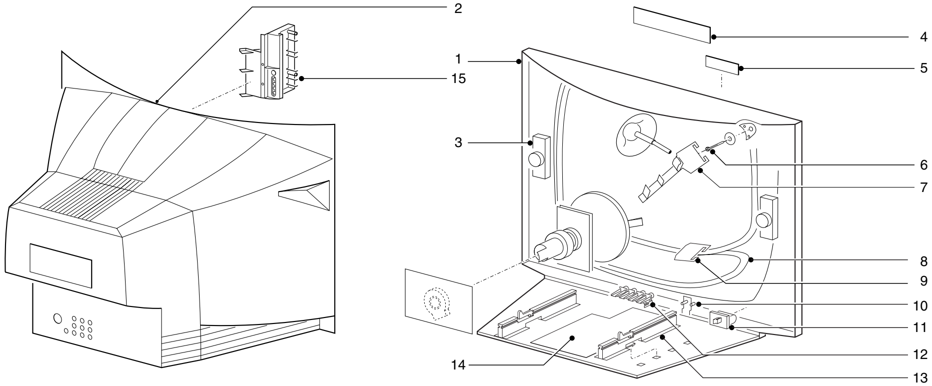
STYLING 469.eps
040804

1abdi*	3141 047 80301	Cabinet 29*
1c*	3141 047 60031	Cabinet
1	3141 047 69581	Cabinet 21”
1h*	3141 047 74791	Front cabinet 29”
1j*	3141 047 82971	Front cabinet 29”
2abdeij*	2422 264 00482	Loudspeaker 16Ω 10W
2c*	2422 264 00379	Loudspeaker 8Ω 10W
2	2422 264 00479	Loudspeaker 16Ω 5W (21”)
2h*	2422 264 00484	Loudspeaker 8Ω 15W
3	3139 137 66921	Top control button
3	Not applicable	(21”)
4	3139 124 30381	Top control bracket
4	Not applicable	(21”)
5abde*	3139 124 60491	Side AV bracket (3P+HP+SV)
5c*	3139 124 39541	Side AV bracket (HP+3AV)
5	3139 124 49861	Side AV bracket (2P+HP) (21”)
5h*	3139 124 48601	Side AV bracket (3P+HP+SV) (29”)
6	Not applicable	
7abde*	3139 177 81191	Rear cover 29”
7c*	3141 047 65241	Rear cover 29”
7	3141 057 80981	Rear cover 21” (4AV)
8	3141 050 00291	Word mark 29”
8	3139 120 01601	Word mark 21”
8h*	3139 120 01671	Word mark 29”
9	3139 124 17541	EHT spacer
10	Not applicable	
11	3141 054 22351	Corner coil bracket
11	Not applicable	(21”)
12	3139 128 23781	Degaussing coil 29" (multi voltage)
12	3139 128 23201	Degaussing coil 21" (multi voltage)
12hij*	3139 128 23381	Degaussing coil 29"
13ahij*	9301 946 60542	Picture tube 29” A68QCU770X73(N)
13bde*	9301 962 60542	Picture tube 29” A68QCU770X73(Q)
13c*	9322 173 75682	Picture tube 29” A68QCP893X001
13f*	9322 202 29682	Picture tube 21” A51AKL13X10N
13g*	9322 202 27682	Picture tube 21” A51AKL13X10
14	Not applicable	
15	3139 138 14831	Mains knob 29”
15	3141 057 69591	Mains knob 21”
15h*	3139 177 69551	Mains knob 29”
16	3139 124 30434	Front interface bracket
16	Not applicable	(21”)
17	3139 124 30411	Light guide 29”
17	3139 124 47501	Light guide 21”
18	3122 224 04623	Mains cord relief
18	Not applicable	(21”)
19	3139 124 33531	Chassis tray
19	Not applicable	(21”)
a*	2422 070 98238	Mains cord UK
bd*	2422 070 98199	Mains cord EU
c*	3139 128 76091	Mains cord EU
e*	2422 070 00013	Mains cord EU
fg*	2422 070 98234	Mains cord 21”
a*	29PT3224/56R	
b*	29PT3224/69S	
c*	29PT5307/60S	
d*	29PT3224/67R	
e*	29PT3224/71R	
f*	21PT2324/71R, /69R, /69S, /67S	
g*	21PT2324/56S	
h*	29PT4324/93R	
i*	29PT3224/93R	
j*	29PT3225/93	

STYLING 475



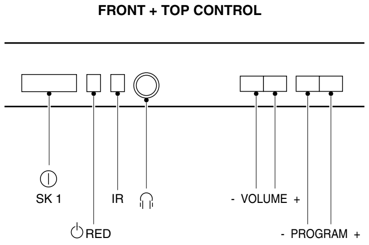


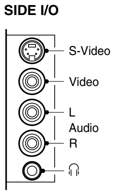


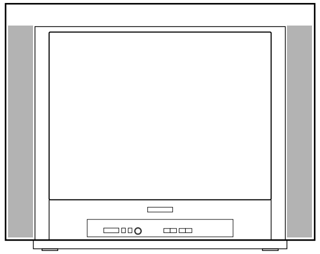
STYLING 475.eps
040804

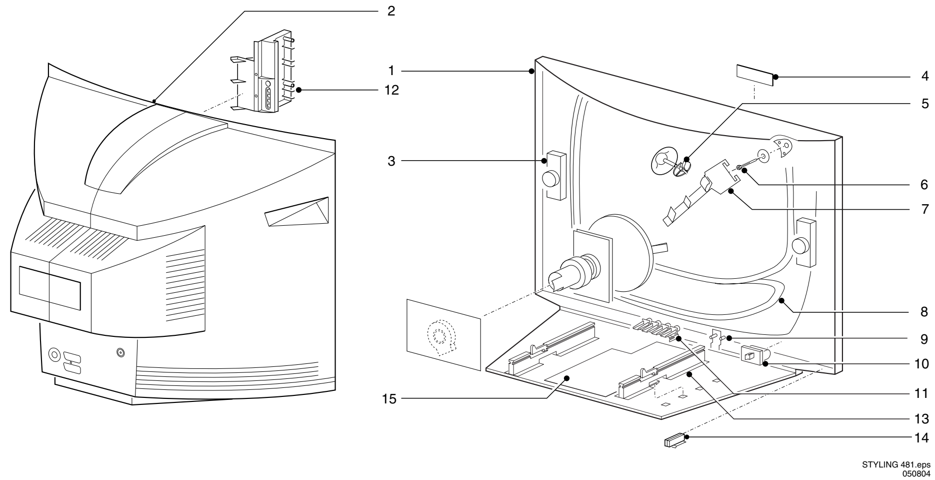
1	3139 177 64551	Cabinet (HP+3AV)
2	3141 057 68421	Rear cover
3	2422 264 00419	Loudspeaker 16Ω 5W
4	3139 177 64541	Door
5	3139 120 01451	Word mark
6	4822 502 14508	CRT fixing screw
7	3141 054 22351	Corner coil bracket
8	3139 128 76331	Degaussing coil 14"
9	Not applicable	
10	3139 124 34321	Light guide
11	3139 177 64481	Mains knob
12	3139 177 64491	Control knob
13	3139 124 34091	Chassis guide (VO)
14	Not applicable	
15	Not applicable	
	9322 191 16682	Picture tube A36AKJ15X07
	14PT6441/37	
	14RFL150/37C	

STYLING 481


FRONT + TOP CONTROL
SK 1
IR
RED
- VOLUME +
- PROGRAM +


SIDE I/O
S-Video
Video
L
Audio
R




2
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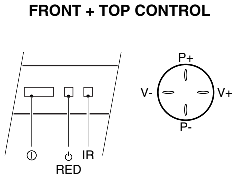
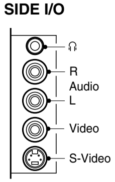
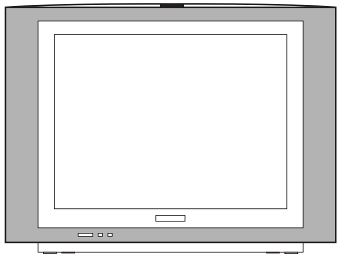
STYLING 481.eps
050804

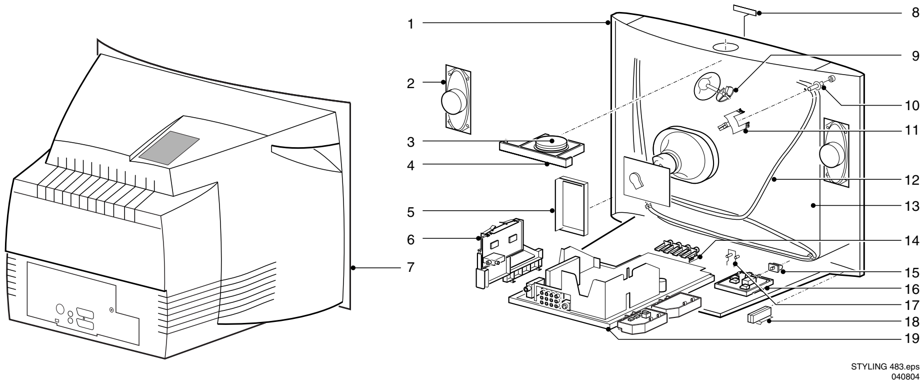
1	3141 057 68831	Cabinet
2	3141 054 22941	Rear cover
3	2422 264 00411	Loudspeaker 16Ω 5W
4	3139 120 01371	Word mark
5	3139 124 23861	EHT spacer
6	4822 502 14508	CRT fixing screw
7	3141 054 22351	Corner coil bracket
8	3141 058 20131	Degaussing coil 20"
9	3139 124 34401	Light guide
10	3139 177 58441	Mains knob
11	3139 177 58431	Control knob
12	Not applicable	
13	3139 124 30811	Chassis guide (VO)
14	Not applicable	
15	Not applicable	
	9322 202 00682	Picture tube A51KQK99X02
	20PT5441/37	

STYLING 483


FRONT + TOP CONTROL
P+
V-
V+
P-
IR
RED


SIDE I/O
R
Audio
L
Video
S-Video

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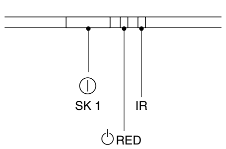
STYLING 483.eps
040804

1	3141 047 68701	Cabinet
2	2422 264 00479	Loudspeaker 16Ω 5W
3	Not applicable	
4	Not applicable	
5	3141 054 22881	Side AV bracket (HP+3AV)
6	Not applicable	
7	3141 058 82511	Rear cover
8	3139 120 01601	Word mark
9	3139 124 17541	EHT spacer
10	3139 120 41141	CRT fixing screw
11	3141 054 22351	Corner coil bracket
12	3139 128 23841	Degaussing coil 21"
13	9301 903 81329	Picture tube A51ERF135X82
14	3141 057 68721	Control knob
15	3141 057 68711	Mains knob
16	Not applicable	
17	3139 124 47501	Light guide
18	Not applicable	Mains cord relief
19	3139 124 25893	Chassis guide (VO)
19	3139 124 25893	Chassis guide (VO)
	3141 057 81012	Lens

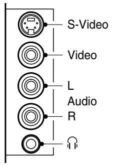
*20PT6341/37

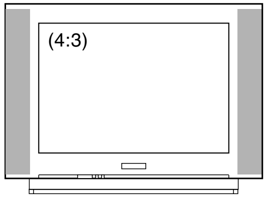
STYLING 484

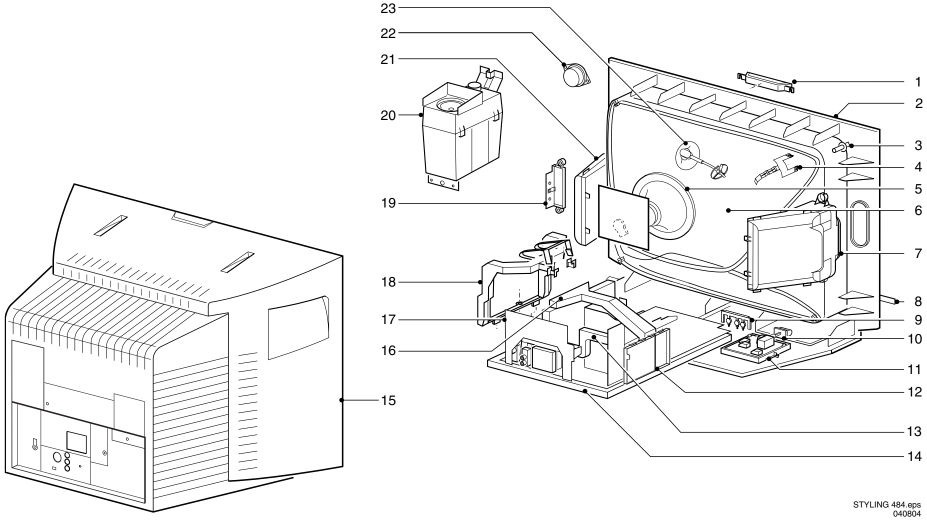
FRONT + TOP CONTROL



SIDE I/O





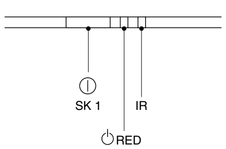


STYLING 484.eps
040804

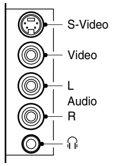
1	3139 177 56381	Top control
1b*	Not applicable	
2	3141 047 69941	Cabinet
2b*	3141 047 81311	Cabinet
3	Not applicable	
4	3141 054 22351	Corner coil bracket
4b*	Not applicable	
5	Not applicable	
6	9301 903 81329	Picture tube A51ERF135X82
6b*	9301 903 43301	Picture tube A51ERF135X80
7	2422 264 00411	Loudspeaker 16Ω 5W
7b*	2422 264 00479	Loudspeaker 16Ω 5W
8	3139 120 01371	Word mark
8b*	3139 120 01601	Word mark
9	3139 124 41421	Light guide
9b*	3139 124 47501	Light guide
10	3141 057 80861	Mains knob
10b*	3141 057 81301	Mains knob
11	Not applicable	
12	Not applicable	
13	Not applicable	
14	3141 054 23251	Chassis guide (VO)
14b*	4822 463 11226	Chassis guide (VO)
15	3141 057 80891	Rear cover
15b*	3141 057 81271	Rear cover (9AV+SVHS)
16	Not applicable	
17	Not applicable	
18	Not applicable	
19	3139 124 37061	Side AV bracket (HP+3P)
19b*	3139 124 48531	Side AV bracket (3P+HP)
20	Not applicable	
21	Not applicable	
22	Not applicable	
23	3139 124 17541	EHT spacer
23b*	Not applicable	
	3139 128 23841	Degaussing coil 21"
	3139 228 86464	Remote control RC19335004/ 01
*a	20PT6441/37	
*b	21PT6341/44	

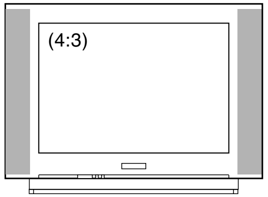
STYLING 487

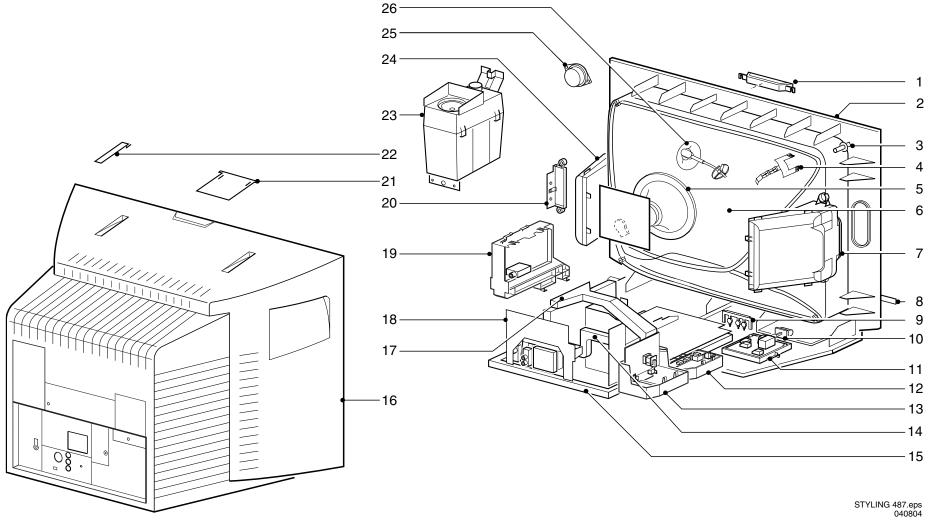
FRONT + TOP CONTROL



SIDE I/O





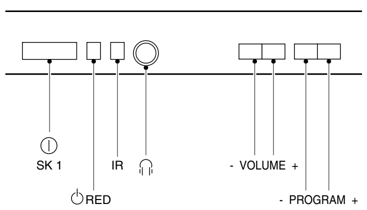


STYLING 487.eps
040804

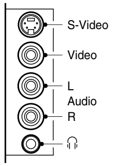
1	3139 188 69231	Top control assy
1b*	3139 188 65201	Top control assy
1c*	3139 188 69251	Top control assy
2	3111 257 60541	Cabinet assy 32"
2b*	3139 177 76421	Cabinet assy 36”
2c*	3139 177 84351	Cabinet assy 36
3	Not applicable	
4	3104 301 14713	Bracket for Degaussing coil
4bc*	3104 304 21092	Bracket for Degaussing coil
5	Not applicable	
6	9301 921 90314	Picture tube W76ERF072X044
6b*	9301 914 50301	Picture tube W86ERF063X144
7	3104 308 78531	Speaker (full range)
8	3141 050 00291	Word mark Philips
8b*	3111 250 01051	Word mark Philips
8c*	3104 300 11991	Word mark Philips
9	3139 124 39211	Light guide
10	2422 128 02971	Mains knob assy
10bc*	3139 177 55091	Mains knob assy
11	Not applicable	
12	Not applicable	
13	3104 304 27641	Bracket for DAF
13c*	3104 304 23041	Bracket for DAF
14	Not applicable	
15	3104 304 23005	Bracket for Large Signal panel
16	3111 257 60161	Rear cover
16b*	3129 124 42591	Rear cover
16c*	3104 328 62011	
17	3104 304 21114	LOT bracket
17bc*	3104 304 23011	LOT bracket
18	Not applicable	
19	Not applicable	
20	3139 124 31651	Bracket for Side I/O panel
21a*	3139 124 39161	V0 plate for rear cover
22	3139 124 40421	Screw cap for rear cover 29"
22bc*	3139 124 40441	Screw cap for rear cover 36”
23	Not applicable	
24	Not applicable	
25	Not applicable	
26	3104 311 03273	EHT cable
26b*	3104 311 03721	EHT cable
27c*	3104 311 03722	EHT cable
	2422 549 44244	Degaussing coil
b*	2422 549 44243	Degaussing coil
c*	2422 549 44242	Degaussing coil
	3104 308 73683	Wire focus cable (black)
	3104 308 73672	Wire focus cable (red)
ab*	4822 404 31291	Mains cord relief
ab*	4622 009 50501	Mains cord
c*	4622 007 51852	Mains cord
	3139 238 07441	Remote control
a*	32PW8719/12	
b*	36PW8719/12	
c*	36PW8719/05	

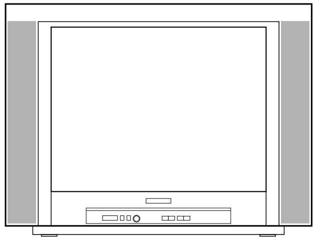
STYLING 488

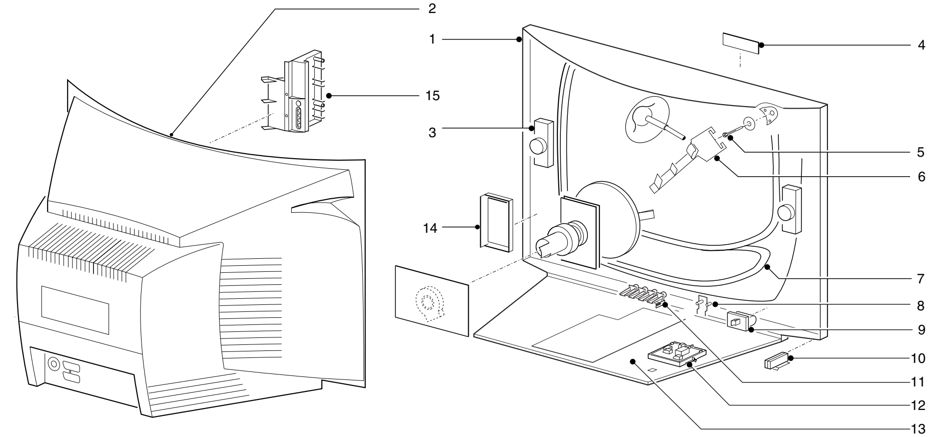
FRONT + TOP CONTROL



SIDE I/O





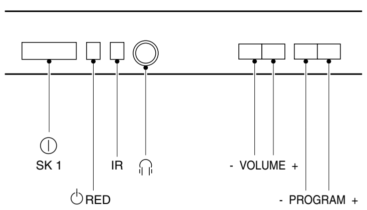


STYLING 489.eps
040804

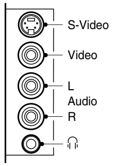
1ac*	3143 027 60573	Cabinet 32"
1b*	3139 177 84541	Cabinet 28”
2ac*	3111 257 56681	Rear cover 32"
2b*	3139 124 32104	Rear cover 28”
3ac*	2422 264 00511	Loudspeaker 16Ω 8W
3b*	2422 264 00476	Loudspeaker 16Ω 10W
4ac*	3141 050 00281	Word mark
4b*	3141 050 00291	Word mark
5ac*	4822 502 14602	CRT fixing screw
5b*	4822 505 11195	CRT fixing screw
6a*	4822 403 70906	Fix degaussing coil
7ac*	2422 549 00128	Degaussing coil
7b*	2422 549 00129	Degaussing coil
8ac*	3139 124 33811	Light guide
9	3139 124 33801	Mains knob cover
9	3139 124 33011	Mains knob shaft
10	3139 124 32521	Front interface bracket
11	Not applicable	
12	Not applicable	
13	3139 124 41203	Chassis tray
13bc*	3139 124 41201	Chassis tray
14	Not applicable	
15ac*	3139 124 37662	Side I/O bracket
a*	9301 880 70301	Picture tube 32” W76ERF022X013
b*	9301 888 10301	Picture tube 28” W66ERF022X013
c*	9301 888 30314	Picture tube 32” W76ERF022X013
	2422 070 98199	Mains cord
c*	2422 070 98238	Mains cord
	3139 228 86471	Remote control RC19039001/01
a*	32PW6408/01	
b*	28PW6408/01	
c*	32PW6408/05	

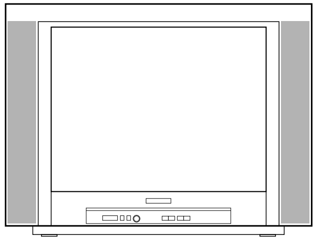
STYLING 489

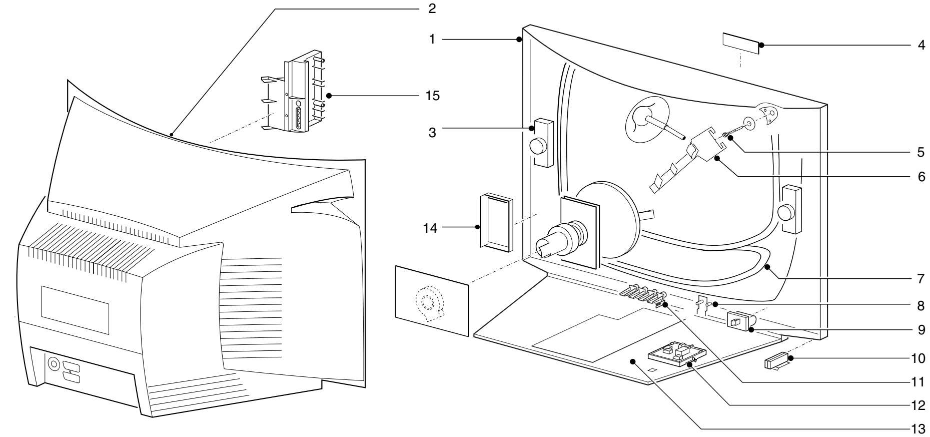
FRONT + TOP CONTROL



SIDE I/O





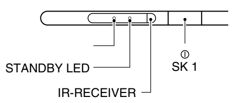


STYLING 489.eps
040804

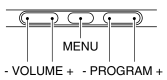
1	3139 177 65982	Front cover
2	3139 124 32061	Rear cover
3	2422 264 00476	Loudspeaker 16Ω 10W
4	3141 050 00291	Word mark
5	3104 308 77012	CRT fixing screw
6	Not applicable	
7	2442 549 00132	Degaussing coil
8	3139 124 33811	Light guide
9	3139 177 66471	Mains knob
10	Not applicable	
11	3139 177 66481	Control knob
12	Not applicable	
13	3139 124 41201	Chassis tray
14	Not applicable	
15	2422 070 98199	Side io bracket
	9301 951 90314	Picture tube A68ERF 112X013/M
	29PT5458/01	

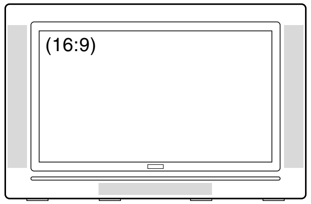
STYLING 490

FRONT CONTROL

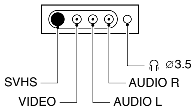


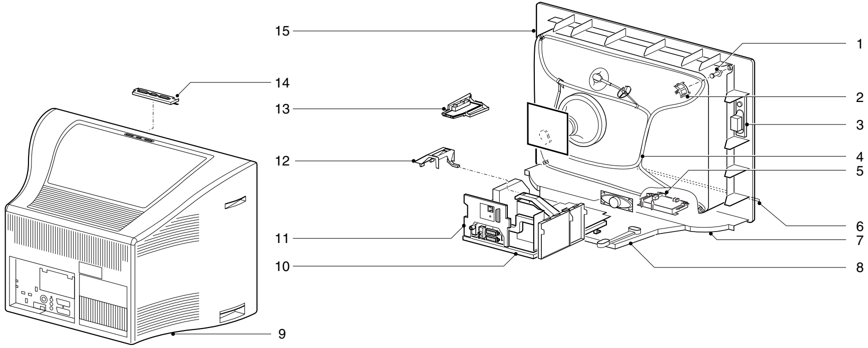
TOP CONTROL





SIDE I/O





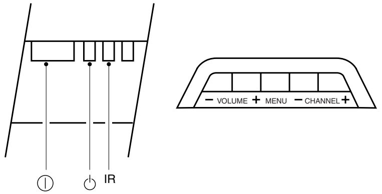
STYLING 490.eps
290704

1ab*	4822 505 11195	CRT screw
1c*	4822 502 14602	CRT screw
2	3111 254 23481	Coil & THT clamp
3ab*	2422 264 00485	Loudspeaker 8Ω 15W
3cfghijk*	2422 264 00491	Loudspeaker 8Ω 10W
3de*	2422 264 00508	Loudspeaker 16Ω 10W
4	2422 549 45514	Degaussing coil 21”
4ci*	2422 549 00132	Degaussing coil 29”
4dj*	2422 549 00129	Degaussing coil 28”
4hk*	2422 549 00128	Degaussing coil 32”
5	3139 177 78701	Mains knob
5c*	3139 124 47691	Mains knob
5defghijk*	3139 177 75621	Mains knob
6ck*	3104 304 26111	light guide
7	Not applicable	
8	3104 304 14765	Mains bracket
8de*	3104 304 00129	Mains bracket
8fghijk*	3104 304 23471	Mains bracket
9	3111 257 60511	Rear cover 21”
9ci*	3139 127 60851	Rear cover 29”
9de*	3134 027 61071	Rear cover 28”
9fgj*	3143 027 60811	Rear cover 28”
9hk*	3139 127 60821	Rear cover 32”
10	Not applicable	
11	Not applicable	
12	3139 124 46811	LOT support bracket
13	3139 188 58131	Side I/O
13c*	3139 188 58151	Side I/O
14	3139 177 75631	Top control
15	3111 257 60501	Cabinet 21”
15b*	3139 124 47711	Cabinet 21”
15ci*	3139 127 60842	Cabinet 29”
15d*	3143 027 61081	Cabinet 28”
15egj*	3143 027 60742	Cabinet 28”
15hk*	3139 127 60752	Cabinet 32”
	3111 250 01031	Word mark 21”
	3111 250 01041	Word mark 28”
	3111 250 01051	Word mark 32”
	9301 913 40301	Picture tube 21” A51ERF135X64
	9301 951 90314	Picture tube 29” A68ERF112X013/m
	9301 934 20307	Picture tube 28” W66ERF112X013
	9301 888 30314	Picture tube 32”W76ERF022X013

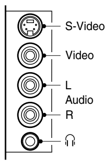
*a	21PT5618/01
*b	21PT5618/58
*c	29PT5618/58
*d	28HW6505/01Z
*e	28HW6505/05Z
*f	28PW6618/01
g*	28PW6618/05
h*	32PW6618/05
I*	29PT5618/01
J*	28PW6618/58
k*	32PW6618/01

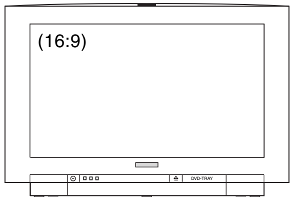
STYLING 491

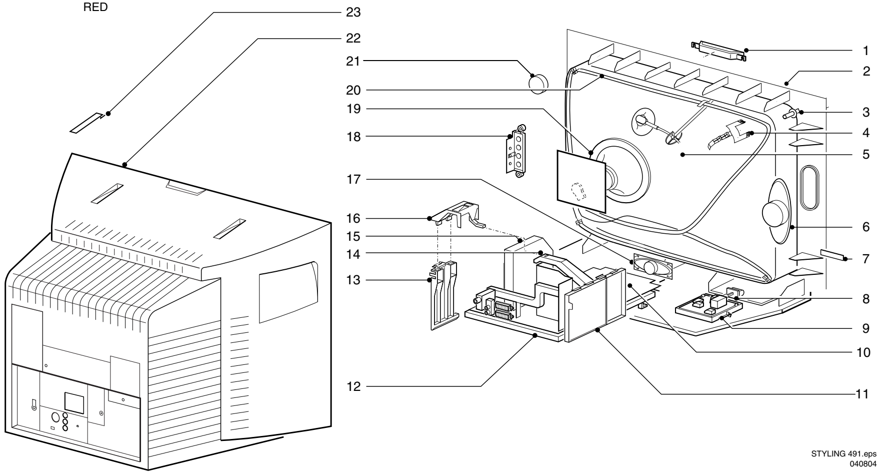
FRONT + TOP CONTROL



SIDE I/O





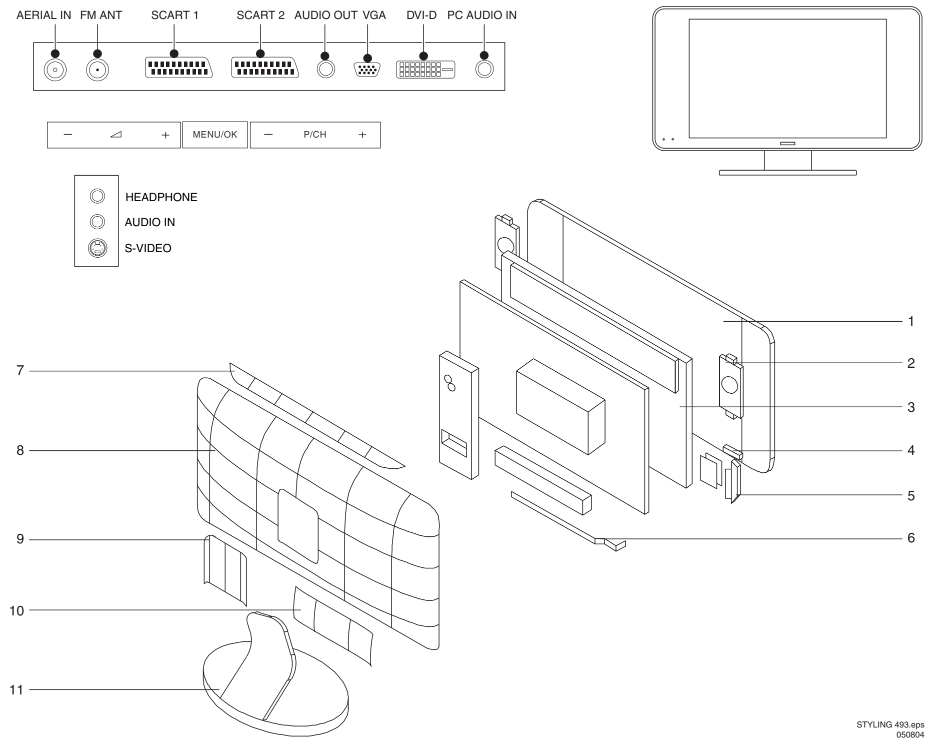


STYLING 491.eps
040804

1	3139 177 61981	Top control assy
1h*	3139 137 66921	Top control assy
2	3127 107 60051	Cabinet assy 21”
2efg*	3143 027 60582	Cabinet assy 29”
2h*	3143 027 60573	Cabinet assy 32”
2it*	3143 027 60592	Cabinet assy 32”
2j*	3193 177 50651	Cabinet assy 24”
2k*	3139 177 50661	Cabinet assy 24”
2lm*	3134 027 61161	Cabinet assy 28”
2nopq*	3143 027 60562	Cabinet assy 28”
2rs*	3134 027 61171	Cabinet assy 32”
3degjklmnopq*	3104 308 77012	CRT screw
3h*	4822 502 14602	CRT screw
4abcd	3139 124 33472	Bracket fix deg. Coil
4efghilpqrst*	4822 403 70906	Bracket fix deg. Coil
4jk*	4822 402 10047	Bracket fix deg. Coil
5	9301 913 40301	Picture tube A51ERF135X64
5efg*	9301 951 90314	Picture tube A68ERF112X013/ M
5hirst*	9301 888 30314	Picture tube W76ERF022X013
5jk*	9301 886 30301	Picture tube W56ERF001X11
5lmnopq*	9301 934 20307	Picture tube W66ERF112X013
6	2422 264 00485	Loudspeaker (Left/Right)
6h*	2411 264 00511	Loudspeaker (Left/Right)
6ilmnopqrst*	2422 264 00484	Loudspeaker (Left/Right)
7	3111 250 01001	Word mark
7efgilmnopqrst*	3141 050 00291	Word mark
7h*	3141 050 00281	Word mark
8	3139 177 55091	Mains knob assy
8jk*	3139 177 50661	Mains knob assy
9	3139 124 32521	Front interface bracket
17	Not applicable	
18	3139 123 57181	Side I/O assy
18jklmnoqsrt*	3139 188 50491	Side I/O assy
18	3139 124 37662	Side I/O panel bracket
19	Not applicable	
20	2422 549 45514	Degaussing coil 21”
20efg*	2422 549 00132	Degaussing coil 29”
20hirst*	2422 549 00128	Degaussing coil 32”
20jk*	2422 549 45778	Degaussing coil 24”
20lmnopq*	2422 549 00129	Degaussing coil 28”
21	Not applicable	
22	3127 107 50051	Rear cover assy
22c*	3127 107 50101	Rear cover assy
22efg”	3139 124 41121	Rear cover assy
22h”	3111 257 56681	Rear cover assy
22i*	3139 124 42961	Rear cover assy
22jk*	3127 107 50131	Rear cover assy
22lm*	3139 124 61061	Rear cover assy
22nopq*	3139 124 42081	Rear cover assy
22rs*	3143 027 61221	Rear cover assy
22t*	3139 124 42961	Rear cover assy
23*	3139 124 40401	Screw cap rear cover
23efg”	3139 124 42231	Screw cap rear cover
23h*	3139 124 40422	Screw cap rear cover
23irst*	3139 124 40421	Screw cap rear cover
23lmnopq*	3139 124 45351	Screw cap rear cover
	2422 070 98199	Mains cord
diko*	2422 070 98238	Mains cord
lr*	4822 321 11425	Mains cord
ms*	4622 007 51622	Mains cord
	4822 404 31291	Mains cord holder
	3104 304 14765	Mains cord holder
	3139 228 86471	Remote control RC19039001/01
	3128 147 78667	Remote control RC19042017/01
	3128 147 15761	Remote control RC4332/01

*a	21PT5518/01
*b	21PT5518/58
*c	21PT5509/01
*d	21PT5518/05
*e	29PT5509/01
*f	29PT5518/01
*g	29PT5518/58
*h	32PW6518/01
*I	32PW6518/05
*j	24PT5618/01
*k	24PW6518/05
*l	28DW6559/01
*m	28DW6559/05
*n	28PW6518/01
*o	28PW6518/05
*p	28PW6518/58
*q	28PW6558/01
*r	32DW6559/01
*s	32DW6559/05
*t	32PW6518/58

STYLING 493

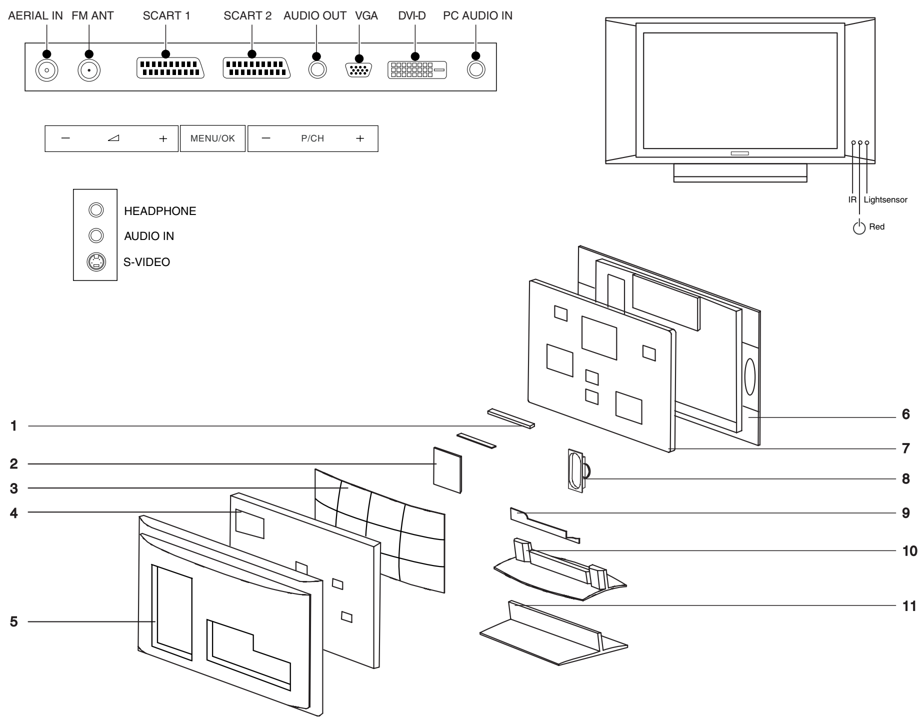


STYLING 493.eps
050804

1ab*	3111 257 60251	Cabinet 23”
1e*	3111 257 60581	Cabinet 23”
1c*	3111 257 60631	Cabinet 26”
1d*	3111 257 60211	Cabinet 17”
1f*	3111 257 60601	Cabinet 26”
1g*	3111 257 60732	Cabinet 23”
1hg*	3111 257 60752	Cabinet 26”
2abefgh*	2422 264 00506	Loudspeaker 8Ω 5W
2d”	2422 264 00507	Loudspeaker 8Ω 5W
3ab*	9322 194 30682	LCD screen LC230W01-A2K2
3abeg*	9322 209 84682	LCD screen LC230W01-A2k8
3cfh*	9322 212 69682	LCD screen LC260W01-A5K6
3d*	9322 196 32682	LCD screen LC171W03-A4
4abg*	3139 124 60061	Lens
4ch*	3139 124 60071	Lens
4d*	3139 124 49011	Lens
4e*	3139 124 61321	Lens
4f*	3139 124 61311	Lens
5abcdef*	3139 188 54481	Side AV
5gh*	3139 188 84661	Side AV
6acefgh*	3139 177 77101	Connector plate
6b*	3139 177 77411	Connector plate
6d*	3139 177 77531	Connector plate
7abeg*	3139 124 48992	Top vent cover
7cfh*	3139 124 49001	Top vent cover 26”
7d*	3139 124 48981	Top vent cover
8ae*	3111 257 60241	Rear cover 23”
8b*	3141 047 80461	Rear cover 23”
8cf*	3111 257 60261	Rear cover 26”
8d*	3111 257 60221	Rear cover 17”
8g*	3111 257 60741	Rear cover 23”
8h*	3111 257 60761	Rear cover 26”
9abeg*	3139 124 48771	User interface cover 23”
9cfh*	3139 124 48761	User interface cover 26”
9d*	3139 124 48781	User interface cover 17”
10abeg*	3139 124 48961	Vesa cover 23”
10cfh*	3139 124 48971	Vesa cover 26”
10d*	3139 124 48951	Vesa cover 17”
11abeg*	3139 128 77021	Metal stand 23”
11cfh*	3139 128 77011	Metal stand 26”
11d”	3139 128 77001	Metal stand 17”
	2422 070 98151	Mains cord EU
	9965 000 07586	Mains cord UK
acdef*	3128 147 15821	Remote control RC1553801/01
b*	3128 147 15901	Remote control RC1553802/01
gh*	3139 238 07951	Remote control RC90331518/01

*a	23PF9946/12
*b	23PF9946/98
*c	26PF9946
*d	17PF9946
*e	23PF9956
*f	26PF9956
*g	23HF9472
*h	26HF9472

STYLING 494

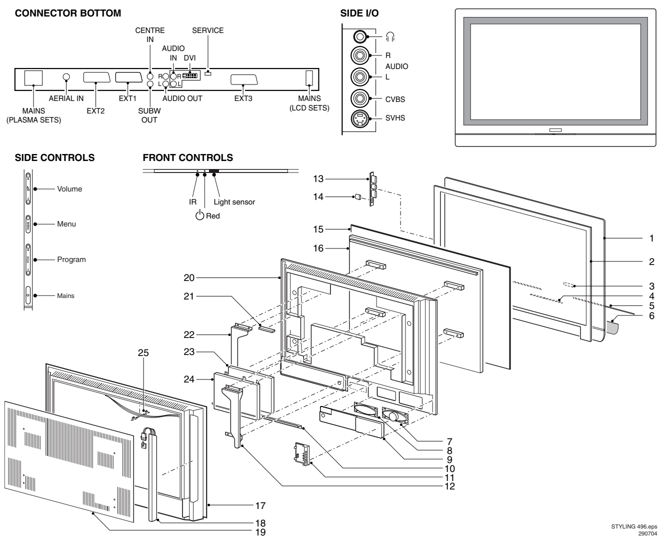


STYLING 494.eps
050804

1abcde*	3139 177 82721	Top control
2a*	3139 121 28221	Vesa plate
2bcde*	3139 121 28051	Vesa plate
3a*	3139 124 61451	Back plate
3bd*	3139 124 60731	Back plate
3ce*	3139 124 60721	Back cover
4	Not applicable	
5a*	3139 177 85481	Rear cover
5b*	3111 257 60441	Rear cover
5c*	3111 257 60461	Rear cover
5d*	3111 257 60452	Rear cover
5e*	3111 257 60472	Rear cover
6a*	3139 177 85491	Front Cabinet pearl white silver 26”
6b*	3111 257 60791	Front cabinet 15”
6c*	3111 257 60421	Front cabinet 20”
6d*	3111 257 60412	Front cabinet 17”
6e*	3111 257 60432	Front cabinet 23”
7a*	9322 212 69682	LCD screen LC260W01-A5K6
7b*	9322 207 48682	LCD screen LC150X02-A4
7c*	9322 211 50682	LCD screen LC201V02-A3K5
7c*	9322 215 40682	LCD screen LC201V02-A3K9
7d*	9322 211 48682	LCD screen LC171W03-A4KC
7e*	9322 214 13682	LCD screen QD23WL05
8a*	2422 264 00506	Loudspeaker 8Ω 5W
8b*	2440 257 30702	Loudspeaker 4Ω 5W
8c*	2422 264 00519	Loudspeaker 8Ω 5W
8d*	2422 264 00526	Loudspeaker 4Ω 5W
8e*	2422 264 00518	Loudspeaker 8Ω 5W
9a*	3139 177 85641	Connector plate
9c*	3139 177 82781	Connector plate
9e*	3139 177 71831	Connector plate
10a*	3139 128 77331	Metal stand
10bd*	3139 128 77051	Metal stand
10ce*	3139 128 76981	Metal stand
11	Not applicable	
ace*	3139 120 01731	Word mark
bd*	3139 120 01651	Word mark
	3139 124 43391	Light guide
	2422 076 00546	Aerial cable
	3128 147 15821	Remote control RC1553801/01
	3139 238 08141	Remote control RC19335019/01
	3128 147 14871	Remote control RC19042008/01
	2422 070 98151	Mains cord EU
	9965 000 07586	Mains cord UK

*a	26PF8946
*b	15PF8946
*c	20PF8846
*d	17PF8946
*e	23PF8946

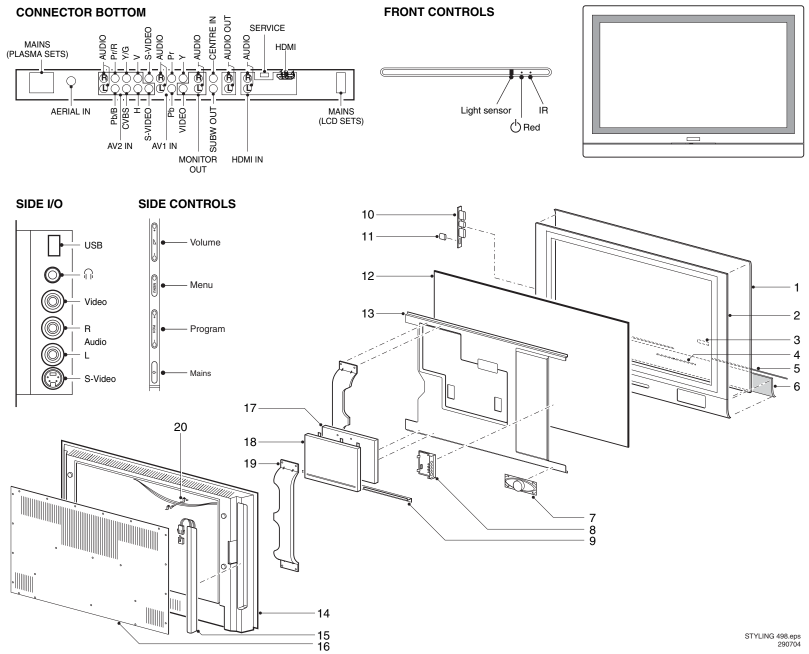
STYLING 496


CONNECTOR BOTTOM
CENTRE IN
AUDIO IN
DVI
SERVICE
AERIAL IN
EXT2
EXT1
SUBW OUT
AUDIO OUT
EXT3
MAINS (PLASMA SETS)
MAINS (LCD SETS)
SIDE I/O
R
AUDIO
L
CVBS
SVHS
SIDE CONTROLS
Volume
Menu
Program
Mains
FRONT CONTROLS
IR
Light sensor
Red
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
STYLING 496.eps
290704

1	3104 328 30484	Front assy sw 42" (/12, /79, /93, /98)
1bd*	3104 328 30474	Front assy w 42"
1	3104 328 30984	Front assy w 42" (/37)
1e*	3104 328 35595	Front assy w 42" (/37)
1	3104 328 30463	Front assy sw 50" (/12, /69, /93)
1	3104 328 30453	Front assy w 50" (/37)
1a*	3104 328 33461	Front assy w 50"
1c*	3104 328 35043	Front assy sw 50"
2	3104 308 11502	Midframe assy sw 42" (/12, /79, /93, /98)
2	3104 308 11492	Midframe assy w 42" (/37)
2	3104 308 11442	Midframe assy sw 50" (/12, /69, /93)
2	3104 308 11432	Midframe assy w 50" (/37)
2a*	3104 308 12631	Midframe assy w 50"
3	3104 300 12381	Word mark PHILIPS
4	3104 304 26791	IR Window sw 42" - 50" (/12, /69 /79, /93, /98)
4	3104 304 26781	IR Window w 42" - 50" (/37)
5	3104 304 26801	Strip L+R sw 42" (/12, /79, /93, /98)
5	3104 304 26931	Strip L+R sw 50" (/12, /69, /93)
6	3104 308 11521	Grill front sw 42" (/12, /79, /93, /98)
6	3104 308 11511	Grill front w 42" (/37)
6	3104 308 11461	Grill front sw 50" (/12, /69, /93)
6	3104 308 11451	Grill front w 50" (/37)
6a*	3104 308 12641	Grill front w 50"
7	2441 257 10002	Loudspeaker L/R
8	2441 257 10003	Loudspeaker L/R pass.
9	3104 308 12471	Loudspeaker box assy 42"
10	3104 301 25111	Connection bracket 42"
11	3104 328 32463	Side I/O
11a*	3104 328 33241	Side I/O
12	3104 308 11961	Fixation bracket R 42"
12	3104 328 32211	Fixation assy R 50"
13	3104 328 31645	Side controls
14	3104 308 11603	Mains knob
15	3104 304 90491	Glass plate 42" (/12)
15	3104 304 90421	Glass plate 42" (/37, /79, /93, /98)
15	3104 304 90411	Glass plate 50" (/12, /37, /69, /93)
16	9322 212 78682	PDP FPF42C128128UC-52 (/12)
16	9965 000 26016	PDP S42AX-XB01 (/37, /79, /93, /98)
16b*d*	9965 000 25997	PDP S42SD-YB03
16	9965 000 26017	PDP S50HW-XB02 (/12, /37, /69, /93)
17	3104 328 32983	Back cover sw 42" (/12, /79, /93, /98)
17	3104 328 33173	Back cover w 42" (/37)
17e*	3104 328 37943	Back cover w 42" (/37)
17b*d*	3104 308 12782	Back cover w 42"
17	3104 328 32962	Back cover sw 50" (/12, /69, /93)
17c*	3104 308 12601	Back cover w 50"
17	3104 328 32952	Back cover sw 50" (/37)
17a*	3104 328 33232	Back cover sw 50" (/37)
18	3104 328 35023	Ambient light R 42"
18	3104 328 30683	Ambient light L 42"
18	3104 304 27331	Ambient light fake cover 42"
18	3104 328 33343	Ambient light R 50"
18	3104 328 33223	Ambient light L 50"
18c*	3104 304 27441	Ambient light fake cover sw 50"
19	3104 301 24761	Back plate 42"
19e*	3104 301 25391	Back plate 42"
19	3104 301 24872	Back plate 50"
19a*	3104 301 25201	Back plate 50"
20	3104 328 32453	Chassis frame 42"
20	3104 328 32444	Chassis frame 50"
21	3104 308 11971	Isolation block 42"
22	3104 308 11951	Fixation bracket L 42"
22	3104 328 32201	Fixation assy L 50"
23	3104 308 11942	Bottom shielding
24	3104 308 11932	Top shielding
25	3104 304 27671	Ambient light wire bracket
	3104 308 78791	Glass stand step 42"- 50" (/37)
	3104 308 78701	Upright stand step 42" - 50" (/37)
	3104 301 24731	Wall mount bracket 42" (/12, /79, /93, /98)
	3104 301 62851	Wall mount bracket 42" (/37)
	3104 301 62821	Wall mount bracket 50" (/12, /69, /93)
	3104 301 62861	Wall mount bracket 50" (/37)
c*	3128 147 16191	Remote control RC4306/01B
	3128 147 16201	Remote control RC4307/01B (/37)
	3128 147 14431	Remote control RC4302/01 (/12, /69, /79, /93, /98)
	2422 070 98223	Mains cord us
	2422 070 98422	Mains cord eur
	2422 070 98258	Mains cord uk
	2422 070 00015	Mains cord aus/nz
	2422 070 00017	Mains cord chn

	42PF9966/12
	42PF9966/37
	42PF9966/79
	42PF9966/93
	42PF9966/98
*b	42PF9956/12
*d	42PF9956/93
*e	42PF9976/37
*c	50PF9956/37
	50PF9966/12
	50PF9966/37
	50PF9966/69
	50PF9966/98
*a	50PF9986/37

STYLING 498


CONNECTOR BOTTOM
MAINS (PLASMA SETS)
AUDIO
Pr/R
Y/G
V
S-VIDEO
AUDIO
Pr
Y
AUDIO
CENTRE IN
AUDIO OUT
AUDIO
SERVICE
HDMI
AERIAL IN
Pb/B
CVBS
H
S-VIDEO
Pb
VIDEO
SUBW OUT
AV2 IN
AV1 IN
MONITOR OUT
HDMI IN
MAINS (LCD SETS)
FRONT CONTROLS
Light sensor
IR
Red
SIDE I/O
USB
Video
R
Audio
L
S-Video
SIDE CONTROLS
Volume
Menu
Program
Mains
1
2
3
4
5
6
7
8
9
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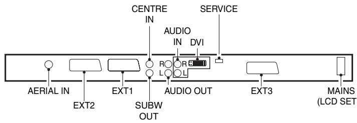
19
20
STYLING 498.eps
290704

1a*	3104 308 13111	Front assy w 32"
1b*	3104 308 11541	Front assy sw 32"
1c*	3104 328 36921	Front assy sw 32"
2a*	3104 308 11551	Midframe assy w 32"
2bc*	3104 308 11561	Midframe assy sw 32"
3	3104 300 12381	Word mark PHILIPS
4a*	3104 304 27291	IR Window w 32"
4bc*	3104 304 27301	IR Window sw 32"
5bc*	3104 304 27021	Strip L+R sw 32"
6a*	3104 308 11571	Grill front w 32"
6bc*	3104 308 11581	Grill front w 32"
7	2441 257 10003	Loudspeaker L/R
8	3104 328 32463	Side I/O
9	3104 301 25111	Connection bracket
10	3104 328 35723	Side controls
11	3104 308 11603	Mains knob
12	9322 209 35682	TFT LCD LQ315T3LZ13
12	9322 217 44682	TFT LCD LC320W01-A6K1
13	3104 308 12672	Chassis frame
14	3104 328 33601	Back cover
14a*	3104 308 12751	Back cover
14c*	3104 328 36931	Back cover
15	3104 328 35013	Ambient light R 32"
15	3104 328 30693	Ambient light L 32"
16	3104 301 24932	Back plate 32"
17	3104 308 11932	Bottom shielding
18	3104 308 11942	Top shielding
19	3104 301 24911	Fixation bracket 32"
20	3104 304 27632	Ambient light wire bracket
	3104 308 78691	Glass stand step 32"
	3104 308 78681	Upright stand step 32"
a*	3104 301 62851	Wall mount bracket 32"
bc*	3104 301 24731	Wall mount bracket 32"
	3128 147 16201	Remote control RC4307/01B (/37, /61)
	3128 147 14431	Remote control RC4302/01 (/69, /93, /98)
c*	3128 147 14411	Remote control RC4301/01B
	2422 070 98208	Mains cord US
	2422 070 98259	Mains cord EUR
	2422 070 98251	Mains cord UK
	2422 070 00016	Mains cord AUS/NZ
	2422 070 00025	Mains cord KOR
	2422 070 98146	Mains cord CHN

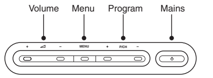
*a	32PF9966/37
*b	32PF9966/69
	32PF9966/93
	32PF9966/61
*c	32PF9976/12

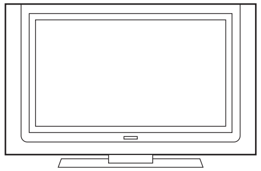
STYLING 499

CONNECTOR BOTTOM (EU & AP Version)

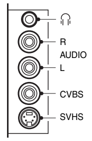

CENTRE IN
SERVICE
AUDIO IN
DVI
R
L
R
L
AERIAL IN
EXT2
EXT1
SUBW OUT
AUDIO OUT
EXT3
MAINS (LCD SETS)

TOP CONTROLS

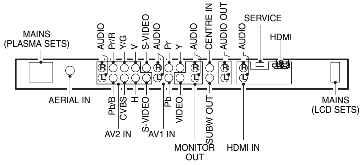

Volume
Menu
Program
Mains



SIDE I/O

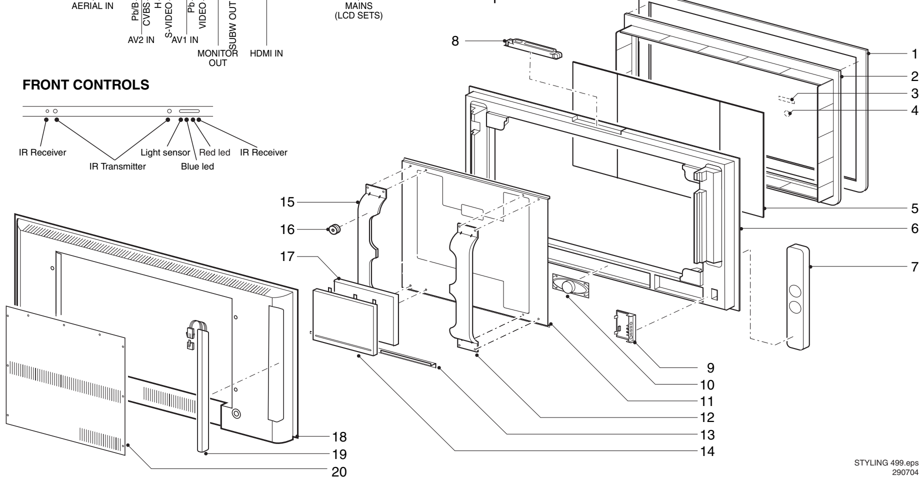

R
AUDIO
L
CVBS
SVHS

CONNECTOR BOTTOM (USA Version)


MAINS (PLASMA SETS)
AUDIO
Pr/R
Y/G
V
S-VIDEO
AUDIO
Pr
Y
AUDIO
CENTRE IN
AUDIO OUT
AUDIO
SERVICE
HDMI
AERIAL IN
Pb/B
CVBS
H
S-VIDEO
Pb
VIDEO
SUBW OUT
AV2 IN
AV1 IN
MONITOR OUT
HDMI IN
MAINS (LCD SETS)

FRONT CONTROLS

IR Receiver
IR Transmitter
Light sensor
Blue led
Red led
IR Receiver

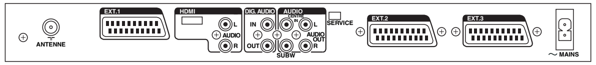

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
STYLING 499.eps
290704

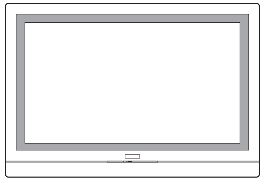
1	3104 308 11751	Inner front assy LCD 32”
1	3104 308 11771	Inner front assy LCD 37”
1	3104 308 11731	Inner front assy LCD 42”
2	3104 308 11761	Outer front assy LCD 32”
2	3104 308 11781	Outer front assy LCD 37”
2	3104 308 11741	Outer front assy LCD 42”
3	3104 304 26541	Light guide
4	3104 304 27411	Lens Proximity sensor
5	9322 209 35682	TFT LCD screen LQ315T3LZ13
5	9322 206 52682	TFT LCD screen LC370W01-A5
5	9322 211 11682	TFT LCD screen LC420W02-A4K3
6	3104 328 30733	Cabinet 32”
6	3104 328 30744	Cabinet 37”
6	3104 328 30723	Cabinet 42”
7	3104 130 02561	Loudspeaker – set 32”
7	3104 130 02571	Loudspeaker – set 37”
7	3104 130 02581	Loudspeaker – set 42”
8	3104 328 30784	Top control
9	3104 328 30792	Side I/O
10	2441 257 10001	loudspeaker centre
11	3104 308 11892	Chassis frame 32”
11	3104 308 11902	Chassis frame 37”
11	3104 308 11881	Chassis frame 42”
12	3104 308 13161	Fixation bracket R 32”
12	3104 308 13171	Fixation bracket R 37”
12	3104 308 13151	Fixation bracket R 42”
13	3104 301 25111	Connection bracket 32”
13	3104 301 24711	Connection bracket 37”
14	3104 308 11931	top shielding
15	3104 308 13161	Fixation bracket L 32”
15	3104 308 13171	Fixation bracket L 37”
15	3104 308 13151	Fixation bracket L 42”
16	3104 308 12071	Mushroom
17	3104 308 11942	Bottom shielding
18	3104 328 30761	Back cover 32”
18	3104 328 30771	Back cover 37”
18	3104 328 30751	Back cover 42”
19	3104 328 35013	Ambient light R 32” + 37”
19	3104 328 30693	Ambient light L 32” + 37”
19	3104 328 35023	Ambient light R 42”
19	3104 328 30683	Ambient light L 42”
20	3104 308 11851	Back plate 32”
20	3104 308 11862	Back plate 37”
20	3104 308 11841	Back plate 42”
	3104 308 78651	Glass stand 32”
	3104 308 78661	Glass stand 37”
	3104 308 78761	Glass stand 42”
	3104 308 78781	Upright stand 32” + 37” + 42”
	3104 301 24731	Wall mount bracket EUR
	3104 301 62851	Wall mount bracket US
	3128 147 14431	RC4302/01 remote EUR
	3128 147 16201	RC4307/01 remote US
	2422 070 98259	Mains cord EUR
	2422 070 98251	Mains cord UK
	2422 070 98208	Mains cord US

XXPF9986/XXX
XXPF9996/XXX

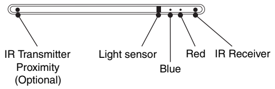
STYLING 500

CONNECTOR BOTTOM


ANTENNE
EXT.1
HDMI
L
AUDIO
R
DIG. AUDIO
IN
OUT
AUDIO
IN
L
AUDIO OUT
R
SUBW
SERVICE
EXT.2
EXT.3
MAINS

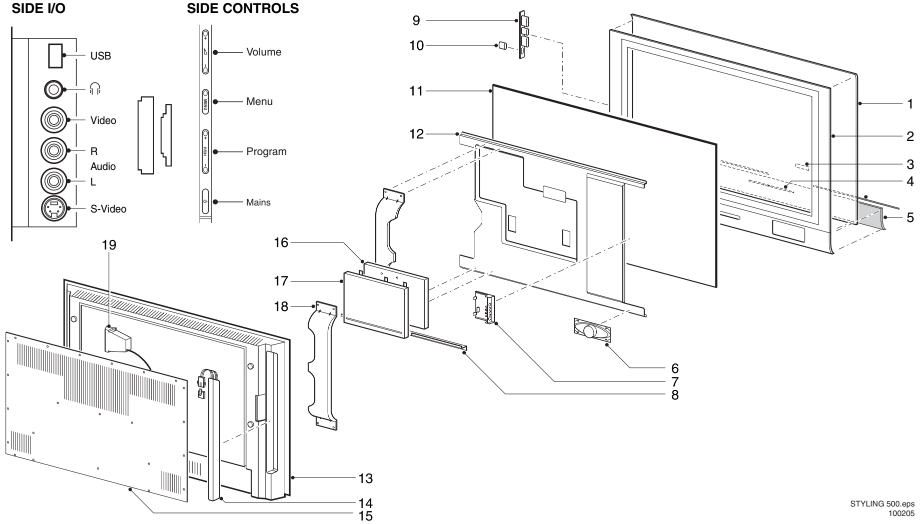


FRONT CONTROLS


IR Transmitter Proximity (Optional)
Light sensor
Blue
Red
IR Receiver

SIDE I/O

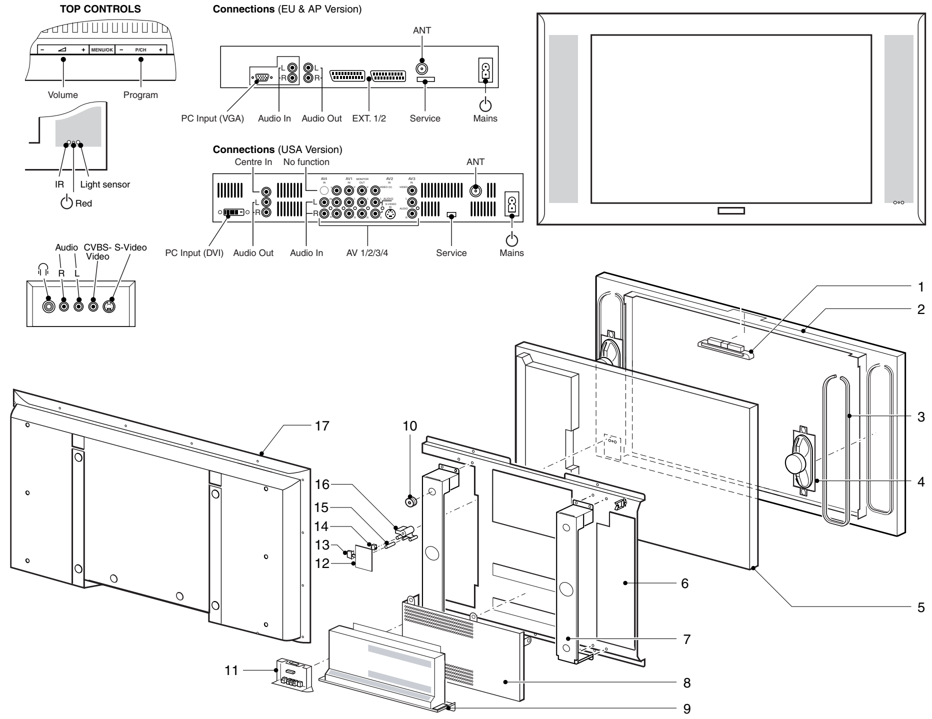
SIDE CONTROLS


USB
Video
R
Audio
L
S-Video
Volume
Menu
Program
Mains
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
STYLING 500.eps
100205

1	3104 308 11531	0003	Front assy w 32”
2	3104 308 11551	0158	Midframe 32”
3	3104 300 12381	0050	Word mark PHILIPS
4	3104 304 27292	0041	IR window
5	3104 308 11571	0151	Grill assy 32”
6	2441 257 10002	5213	Loudspeaker
7	3104 328 33211	1116	Side I/O assy
8	3104 308 11613	0036	Connecting plate assy
9	3104 328 32471	1114	Side control assy
10	3104 308 11601	0049	Mains knob assy
11	9322 209 35682	1004	LCD display 32”
12	3104 308 12672	0206	Chassis frame 32”
13	3104 328 32991	0010	Back cover assy 32”
14	Not Applicable		
15	3104 301 24931	0156	Metal back plate 32”
16	3104 308 11922	0071	Bottom shielding
17	3104 308 11912	0070	Top shielding
18	3104 301 24912	0164	Fixation bracket
19	3104 328 29911	0150	Card reader assy

32PF9956/12

STYLING 504


TOP CONTROLS
– + MENU/OK – P/CH +
Volume
Program
IR
Light sensor
Red
Audio
CVBS-Video
S-Video
R
L
Connections (EU & AP Version)
ANT
L
R
PC Input (VGA)
Audio In
Audio Out
EXT. 1/2
Service
Mains
Connections (USA Version)
Centre In
No function
AV4 IN
AV1 IN
MONITOR OUT
AV2 IN
AV3 IN
PC Input (DVI)
Audio Out
Audio In
AV 1/2/3/4
Service
Mains
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17

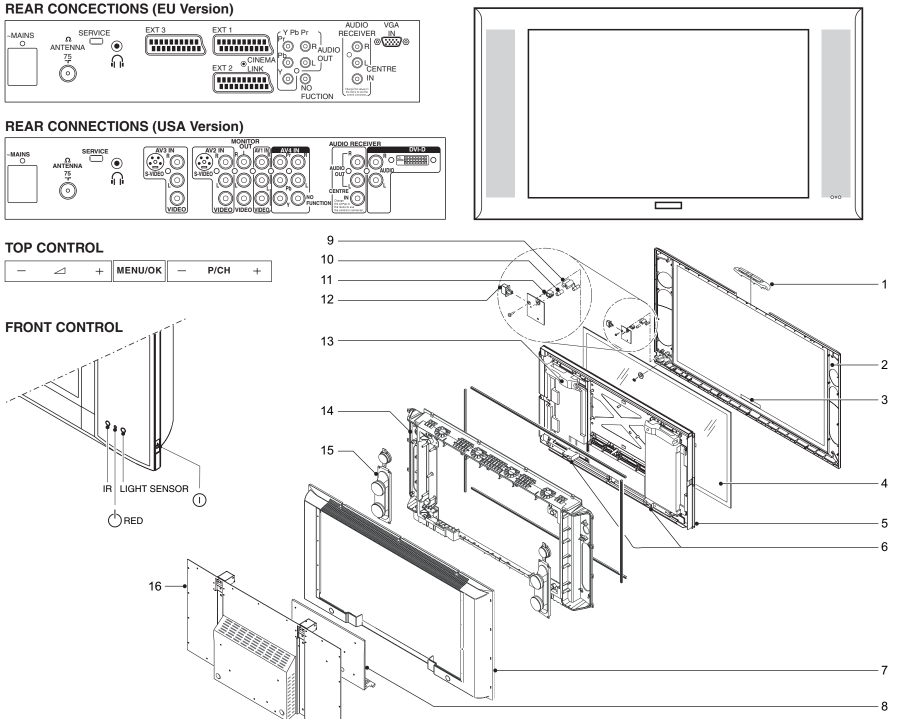
STYLING 504.eps
251004

1	3104 328 32821	Top control
2	3104 328 32511	Front Assy 30” (AUO displ.)
2	3104 328 32611	Front assy (LPL displ.)
2	3104 328 38351	Front assy (LPL ITV)
3	3104 328 10831	Foam 250x15x0,5
4	3104 308 78531	Loudspeaker L/R
5	9322 206 53682	LC300W01 C5 (LPL) 30”
5	9322 206 49682	T296XW01 (AUO) 30”
6	3104 328 32572	Chassis frame for AUO displ. 30”
6	3104 328 32582	Chassis frame for LPL displ. 30”
7	3104 301 25001	Fixation bracket 30”
8	3104 308 12321	Bottom shielding
9	3104 308 12331	Top Shielding
10	3104 308 12071	Mushroom assy
11	3104 328 26371	Side I/O
12	3104 328 34781	Led + Switch assy
13	3104 308 11271	Mains knob
14	3122 124 36461	Daylight filter
15	3122 124 36272	Light guide cover
16	3122 124 36461	Light guide lens system
17	3104 308 12191	Back cover 30”
	3104 300 12241	Word mark PHILIPS
	3141 050 00431	Magnavox word mark (30MF200V/17)
	3104 308 78731	Stand 30” PHILIPS
	3104 308 11141	Stand 30” Magnavox
	3104 301 25171	Wall mount bracket 30” Philips

3104 308 11151	Wall mount bracket 30” Magnavox
3139 238 07181	Remote control RC4333/01 (/12)
3139 238 07591	Remote control RC4335/01 (/98 /79)
3139 238 10141	Remote control RC4341/01B (Magnavox US)
2422 070 98251	Mains cord /05 /98 /79
2422 070 98259	Mains cord /12 /98
2422 070 00016	Mains cord /79
2422 070 98208	Mains cord Magnavox US
2422 070 98146	Mains cord /93

30PF9946/xx
30PF9946D/37
30HF9442/12 (ITV)
30MF200V/17 (Magnavox US)

STYLING 505


REAR CONCECTIONS (EU Version)
~MAINS
ANTENNA
75
SERVICE
EXT 3
EXT 1
EXT 2
CINEMA LINK
Y Pb Pr
Pr
Pb
Y
R
L
AUDIO OUT
NO FUCTION
AUDIO RECEIVER
R
L
CENTRE IN
VGA IN
REAR CONNECTIONS (USA Version)
~MAINS
ANTENNA
75
SERVICE
AV3 IN
S-VIDEO
VIDEO
AV2 IN
MONITOR OUT
AV1 IN
AV4 IN
Pr
Pb
Y
NO FUNCTION
AUDIO RECEIVER
AUDIO OUT
CENTRE IN
DVI-D
AUDIO
TOP CONTROL
– + MENU/OK – P/CH +
FRONT CONTROL
IR
LIGHT SENSOR
RED
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16

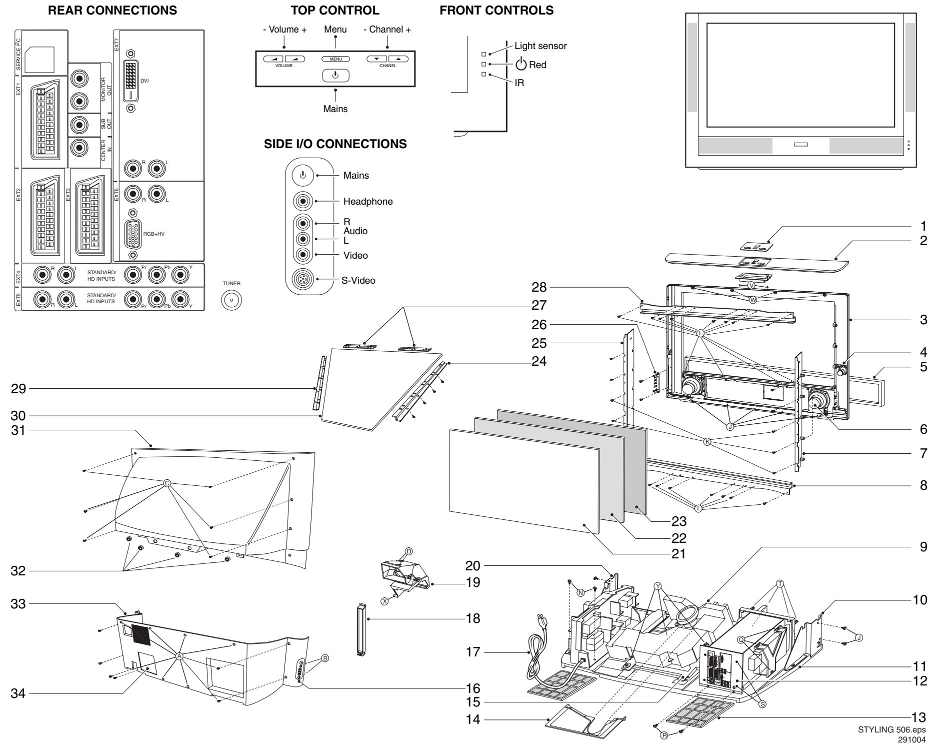
STYLING 505.eps
271004

1	3104 328 32831	Top control
2	3104 328 32531	Front assy 37”
2	3104 328 32551	Front assy 42”
2	3104 328 38491	Front assy 42” (ITV)
2a*	3104 328 32582	Front assy 42”
3	3104 300 12241	Word mark PHILIPS
4	3104 304 27401	Glass plate 37”
4	3104 304 27391	Glass plate 42”
5	9965 000 26018	PDP Panel 37”
5	9965 000 25997	PDP Panel 42”
6	3122 128 14712	PDP bracket 37”
7	3122 128 14721	Back display 37”
7	3122 128 14222	Back display 42”
7a*	3122 128 14261	Back display 42”
8	3104 308 12362	Connect plate assy 37”, 42”
9	3122 124 36461	Lens system
10	3122 124 36271	LED guide
11	3122 124 36081	Day light filter
12	3122 128 13901	Mains knob
13	3104 308 12001	Block assy PDP 37”
13	3104 308 11991	Block assy PDP 42”
14	3104 328 32631	Shielding frame 37”
14	3104 328 36631	Shielding frame 42”
14a*	3104 328 36641	Shielding frame 42”
15	3104 308 78551	Speaker
16	3104 308 12261	Metal back plate 37”
16	3104 308 12271	Metal back plate 42”

37PF9946/xx
37PF9946D/xx

37PF9936/xx
37PF9975/xx
42PF9946/xx
42HF9442/xx (ITV)
42PF9936D/xx
*a 107P4/10 (42”)

STYLING 506


REAR CONNECTIONS
SERVICE/PC
EXT1
EXT2
EXT3
EXT4
EXT5
EXT7
EXT8
MONITOR OUT
SUB OUT
CENTER IN
DVI
RGB+HV
STANDARD/ HD INPUTS
TUNER
TOP CONTROL
- Volume +
Menu
- Channel +
Mains
FRONT CONTROLS
Light sensor
Red
IR
SIDE I/O CONNECTIONS
Mains
Headphone
R
Audio
L
Video
S-Video
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
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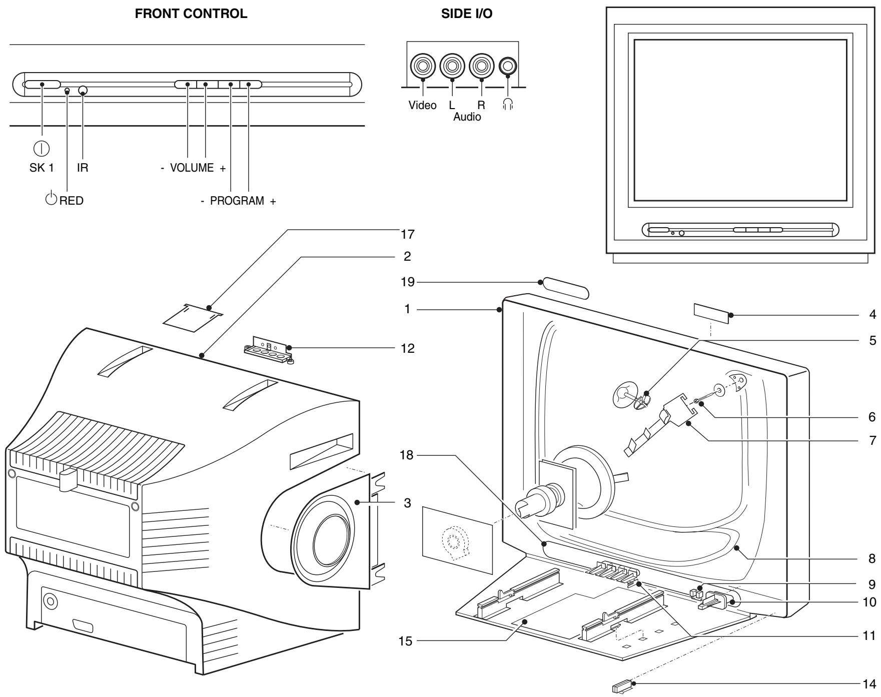
26
27
28
29
30
31
32
33
34

STYLING 506.eps
291004

1	3135 030 00411	Overlay control
2	3135 037 52701	Top cover
3	3135 037 54831	Front
4	2422 264 00464	Tweeter
5	3135 037 54841	Grille
6	2422 264 00463	Woofer
7	3135 031 20383	Rail vertical right
8	3135 031 20362	Rail horizontal
9	3122 438 71800	Light engine
	3122 438 71310	Lamp
	9137 001 77705	Lamp supply
10	3135 031 20264	Bracket right interconnect
11	3135 034 02721	Bottom plate
12	3135 037 54851	Label rear jack
13	3135 037 51811	Filter
14	3135 034 04241	Light shield
15	3135 034 01923	Bracket light engine
16	3135 037 51623	Cover side jack
17	3135 031 01721	Mains cord EU
17	3135 031 01711	Mains cord UK
18	3135 034 01421	Support back
19	3135 038 70051	Fan assy
	3135 034 01432	Lamp cap back
	3135 034 01441	Lamp cap front
20	3135 031 20274	Bracket left interconnect
21	3135 033 20301	Fresnel lens
22	3135 033 20311	Lenticular lens
23	Not applicable	
24	3135 034 01511	Support mirror right
25	3135 031 20373	Rail vertical left
26	3135 034 01872	Frame LED sensor board
27	3135 034 01501	Support mirror top
28	3135 031 20362	Rail horizontal
29	3135 034 01521	Support mirror left
30	3135 034 90122	Mirror
31	3135 037 52881	Rear cover upper
32	3135 030 40151	Cap mounting
33	3135 037 52891	Rear cover lower
34	3135 034 04271	Door lamp access

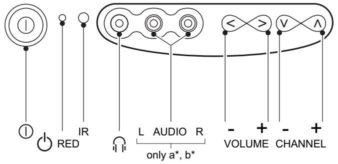
STYLING 507

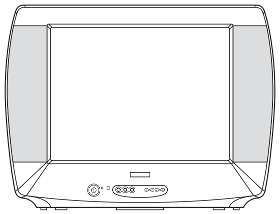

FRONT CONTROL
SK 1
IR
- VOLUME +
RED
- PROGRAM +
SIDE I/O
Video
L
R
Audio
1
2
3
4
5
6
7
8
9
10
11
12
14
15
17
18
19

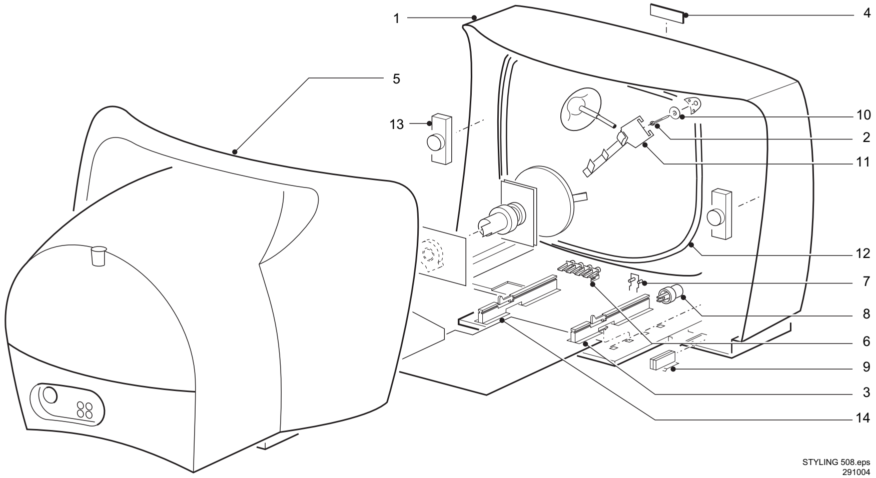
STYLING 507.eps
291004

1	3141 047 81371	Cabinet 29”
1	3141 057 81761	Cabinet 34”
1ab*	3141 057 69581	Front Cabinet 21”
1c*	3141 047 74961	Front Cabinet 25”
1de*	3141 047 83031	Front Cabinet 25”
1fg*	3141 047 74741	Front Cabinet 29”
2	3141 057 85051	Rear cover 29”
2	3141 057 81751	Rear cover 34”
2a*	3141 057 80971	Back Cover 21SYRFA (12AV+SVHS)
2b*	3141 057 80981	Back Cover 21SYRFA (4AV)
2c*	3139 177 82871	Back Cover 25SYRFB/12AV+SV
2d*	3139 177 85681	Back Cover 25SYRF
2e*	3139 177 85671	Back Cover 25SYRF
2f*	3139 177 85631	Back Cover 29SYRF
2g*	3139 177 85661	Back Cover 29SYRF
3	2422 264 00484	Loudspeaker 8Ω 15W
3a*	2422 264 00505	Loudspeaker 8Ω 5W
3b*	2422 264 00479	Loudspeaker 16Ω 5W
3c*	2422 264 00475	Loudspeaker 16Ω 20W
3de*	2422 264 00476	Loudspeaker 16Ω 10W
3fg*	2422 264 00482	Loudspeaker 16Ω 10W
4	3139 120 01671	Word mark 29”
4	3141 050 00511	Word mark 34”
4abde*	3139 120 01601	Word mark 20LCS
5	3141 054 22031	EHT spacer
6	4822 502 14602	CRT fixing screw
6ab*	4822 502 14508	CRT fixing screw
6cde*	4822 505 11195	CRT fixing screw
7	Not applicable	Degaussing coil bracket
8	3139 128 23791	Degaussing coil 29”
8	3104 308 20581	Degaussing coil 34”
8a*	4822 157 11444	Degaussing coil 21”
8b*	4822 157 11446	Degaussing coil 21”
8cde*	2422 549 45778	Degaussing coil 25”
8fg*	3139 128 23381	Degaussing coil 29”
9	3139 124 47501	Light guide (3 LENS)
10	3139 177 69551	Mains knob
10ab*	3141 057 69591	Mains knob
11	3139 177 75181	Control knobs
11ab*	3141 057 69601	Control knobs
12	3139 124 48601	Side I/O bracket (3P, HP, SV)
12a*	3139 124 48531	Side I/O bracket (3P+HP)
12b*	3139 124 49861	Side I/O bracket (2P+HP)
13	Not applicable	
14	Not applicable	
15	3141 054 23421	Chassis tray
16	Not applicable	
17	Not applicable	VO plate
18	3139 177 77971	Front lens
18ab*	3141 057 69611	Front lens
19	Not applicable	
20	Not applicable	
	9322 213 83682	Picture tube 29” A68QCP691X500
	9301 953 60542	Picture tube 34” A80ERF142X45
	9322 202 27682	Picture tube 21” A51AKL13X10R
	9301 943 70522	Picture tube 25” A59QDC280X61(N)
	9301 946 60542	Picture tube 29” A68QCU770X73(N)
	3139 124 46671	Mains control bracket
	3141 054 23441	SSB bracket
	3141 051 20521	SSB cover shielding
	3141 051 20531	SSB main shielding
	3141 5054 23431	Interface board bracket
	4622 006 06061	Mains cord
	29PT7333/93R	
	34PT7333/93R	
a*	21PT3224/93R	
b*	21PT2324/79R	
c*	25PT4524/93R	
d*	25HT3312/93R	
e*	25HT3317/93Y	
f*	29HT3312/93R	
g*	29HT3317/93Y	

STYLING 508


IR
RED
L AUDIO R
only a*, b*
- + - +
VOLUME CHANNEL



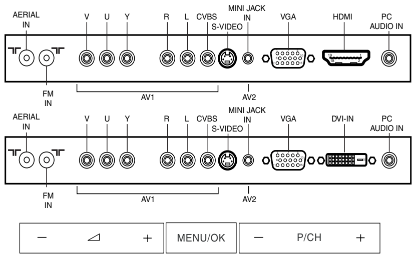

1
2
3
4
5
6
7
8
9
10
11
12
13
14

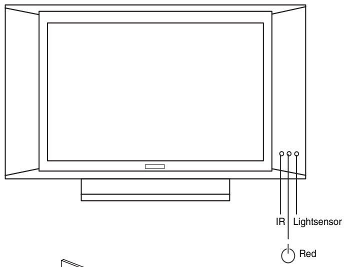
STYLING 508.eps
291004

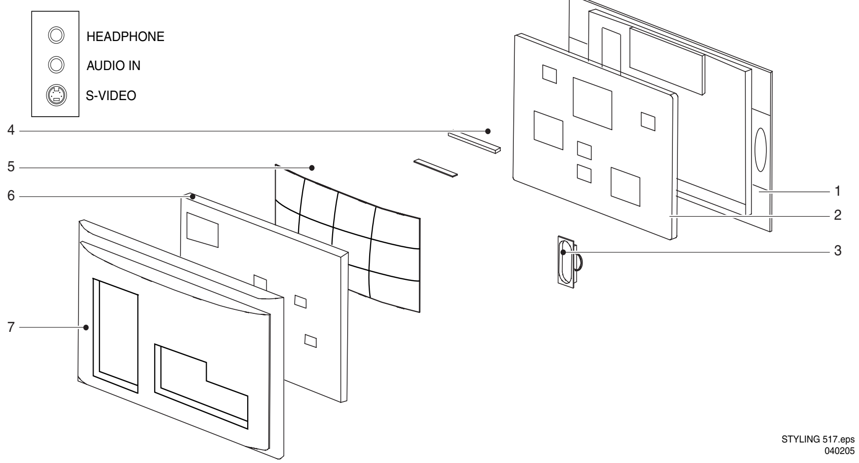
1	3139 177 60861	Cabinet
2	4822 502 14508	CRT fixation screw
3	4822 463 11125	Chassis guide (VO)
4	3139 120 01551	Word mark
5	3139 124 45071	Rear cover
6	3139 137 68342	Control knob
7	4822 380 10207	Light guide
8	3139 177 60831	Mains knob
9	4822 466 11453	Mains cord relief
10	4822 532 12744	EHT spacer (3.3mm)
11	4822 404 31025	Degaussing coil bracket
12	3139 128 23841	Degaussing coil (multi molt)
13	4822 240 10393	Loudspeaker 8Ω 6W
14	4822 463 11125	Chassis guide
	9301 843 10329	Picture tube 20” A51EHW135X47

20L135/37R

STYLING 517


AERIAL IN
V U Y
R L CVBS
MINI JACK IN
S-VIDEO
VGA
HDMI
PC AUDIO IN
FM IN
AV1
AV2
AERIAL IN
V U Y
R L CVBS
MINI JACK IN
S-VIDEO
VGA
DVI-IN
PC AUDIO IN
FM IN
AV1
AV2
− +
MENU/OK
− P/CH +


IR
Lightsensor
Red

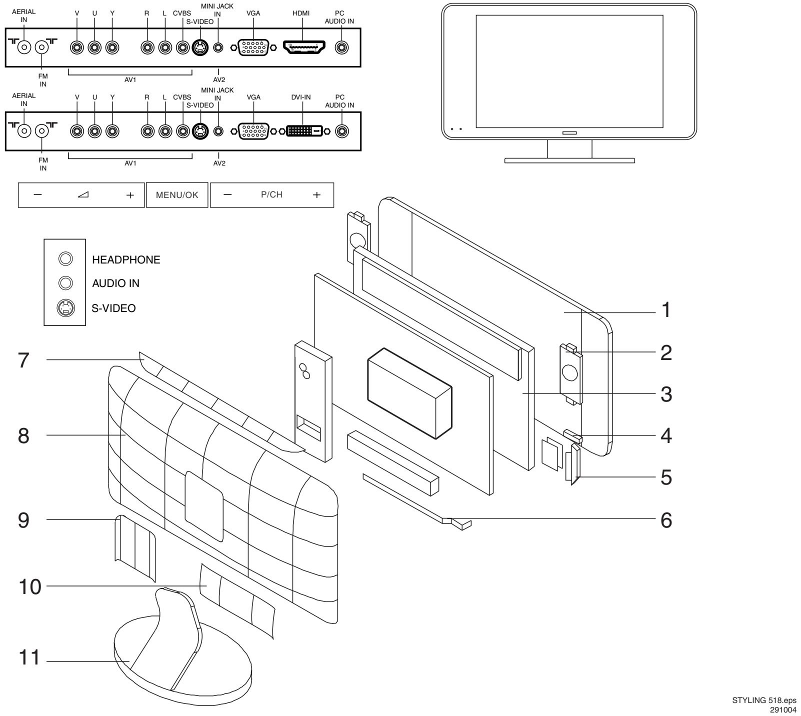

HEADPHONE
AUDIO IN
S-VIDEO
1
2
3
4
5
6
7

STYLING 517.eps
040205

1	3139 177 82721	Top control
2	3139 121 28221	Vesa plate
3	3139 124 61451	Back plate
4	Not applicable	
5	3139 177 85481	Rear cover
6	3139 177 85491	Front Cabinet pearl white silver
6	3139 124 61471	Front Cabinet light grey
7	9322 212 69682	LCD screen LC260W01-A5K6
8	2422 264 00506	Loudspeaker 8Ω 5W
9	3139 177 85641	Connector plate
10	3139 128 77331	Metal stand
11	Not applicable	
	3139 120 01731	Word mark
	3139 124 43391	Light guide
	2422 076 00546	Aerial cable
	3128 147 15821	Remote control RC1553801/01
	2422 070 98151	Mains cord EU

26PF8946/12

STYLING 518



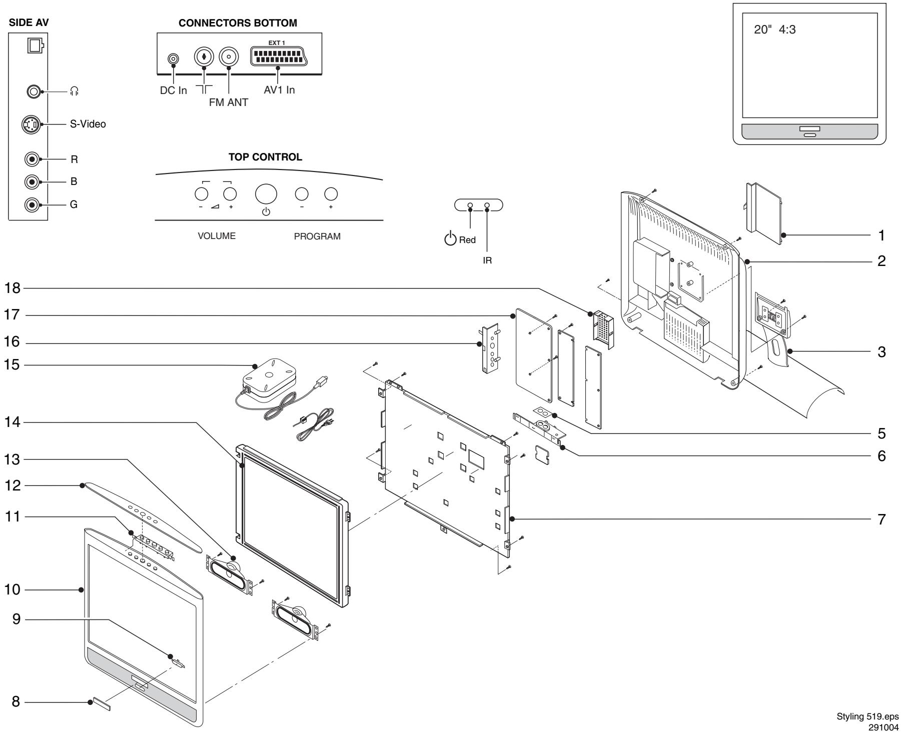
STYLING 518.eps
291004

1a*	3141 047 80851	Front Cabinet (-/37)
1b*	3141 047 83331	Front Cabinet (-/37)
1c*	3141 047 78791	Front Cabinet (-/79 & -/98)
1d*	3141 047 83391	Front Cabinet (-/37)
1e*	3141 047 77111	Front Cabinet (-/79 & -/98)
1f*	3141 047 83411	Front Cabinet (-/79 & -/98)
1g*	3141 047 83421	Front Cabinet (-/79 & -/98)
2a*	2422 264 00507	Loudspeaker 8Ω 5W
2bcdefg	2422 264 00506	Loudspeaker 8Ω 5W
3a*	9322 196 32682	LCD Panel LC171W03-A4
3bcf*	9322 212 69682	LCD Panel LC260W01-A5K6
3deg*	9322 209 84682	LCD Panel LC230W01-A2K8
4a*	3139 124 49011	Lens 17”
4bc*	3139 124 60071	Lens 26”
4de*	3139 124 60061	Lens 23”
4fg*	3139 124 61321	Lens 23” Pixel plus
5	3139 124 49031	Control knobs LCO4
6a*	3139 177 80711	Connector plate B/CINCH/HDMI 17” (-/37)
6a*	3139 177 77521	Connector plate B/CINCH/CVI 17” (-/79 & -/98)
6bd*	3139 177 80701	Connector plate B/CINCH/HDMI 23/26” (-/37)
6ceg*	3139 177 77411	Connector plate B/CINCH/CVI 23/26” (-/79 & -/98)
7a*	3139 124 48981	Top ventilator cover 17”
7bcf*	3139 124 49001	Top ventilator cover 26”
7deg*	3139 124 48992	Top ventilator cover 23”
8a*	3141 047 81051	Back Cover 17” (-/37)
8a*	3141 047 80471	Back Cover 17” (-/79 & -/98)
8bcf*	3141 047 80451	Back Cover 26”
8deg*	3141 047 80461	Back Cover 23”
9a*	3139 124 48951	VESA cover 17"
9bcf*	3139 124 48971	VESA cover 26"
9deg*	3139 124 48961	VESA cover 23"
10a*	3139 124 60601	Door 17” (-/37)
10a*	3139 124 60591	Door 17” (-/79 & -/98)
10bcf*	3139 124 48761	Door 26”
10deg*	3139 124 48771	Door 23”
11a*	3139 128 77001	Stand 17”
11bcf*	3139 128 77011	Stand 26”
11deg*	3139 128 77021	Stand 23”

	3139 128 77421	VESA plate stand (spacer. for -/37 only)
	3139 120 41551	Stand screw
abd*	3128 147 15921	Remote control RC1553803/01 (for -/37 only)
ace*	3128 147 15901	Remote control RC1553802/01 (for -/79 & -/98 only)
fg*	3139 238 08571	Remote control RC1553805/01 (for -/79 & -/98 only)
	2422 070 98208	Mains cord UL (for -/37 only)
	2422 070 98248	Mains cord AUS/NZ (for -/79 only)
	2422 070 98151	Mains cord EU (for -/98 only)
	2422 076 00584	Cable VGA to CINCH (red, green and blue) 1.5m
	2422 076 00604	Antenna cable F-type (for -/37 only)
	2422 076 00474	Antenna cable IEC-type (for -/79 & -/98 only)
	2422 076 00546	FM aerial cable
	2422 076 00585	Cable PHONE to CINCH (red, green and blue) 1.5m

*a	17PF9946
*b	26PF9966
*c	26PF9946
*d	23PF9966
*e	23PF9946
*f	26PF9956
*g	23PF9956

STYLING 519



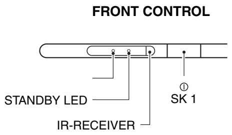
Styling 519.eps
291004

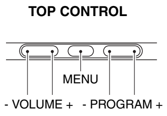
1a*	3139 177 71241	Top control 14”
1c*	3139 188 81571	Top control 15”
1b*	3139 188 81551	Top control 20”
2a*	3139 121 28051	Vesa plate 14”
2c*	3139 177 85360	Vesa plate 20”
2b*	3139 121 28051	Vesa plate 15”
3	Not applicable	
4	Not applicable	
5ab*	3139 257 60571	Rear cover 14”/15”
5c*	3111 257 60491	Rear cover 20”
6a*	3111 257 60561	Front Cabinet 14”
6c*	3111 257 60482	Front Cabinet 20”
6b*	3111 257 61231	Front Cabinet 15”
7a*	9322 207 49682	TFT 14” LCD T140VN01
7c*	9322 215 40682	TFT 20” LCD LC201V02-A3K9
7b*	9322 207 48682	TFT 15” LCD LC150X02-A4
8ab*	2422 264 00512	Loudspeaker 4Ω 5W
8c*	2422 264 00444	Loudspeaker 8Ω 10W
9	3139 177 82781	Connector plate
10a*	3139 128 77082	Metal stand 14”
10c*	3139 128 77062	Metal stand 20”
10b*	3139 128 77451	Metal stand 15”
11	Not applicable	
ab*	3139 120 01771	Word mark 14”/15”
c*	3139 120 01601	Word mark 20”
a*	3139 124 46161	LCD lens 14”
bc*	3139 177 72821	LCD lens 15/20”
	3139 238 08141	Remote control RC19335019/01

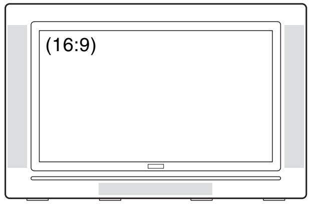
	2422 070 98151	Mains cord EUR
	2420 070 98147	Mains cord UK

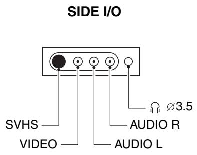
*a	14PF7846/12/58
*b	15PF7846/12/58
*c	20PF7846/12/58

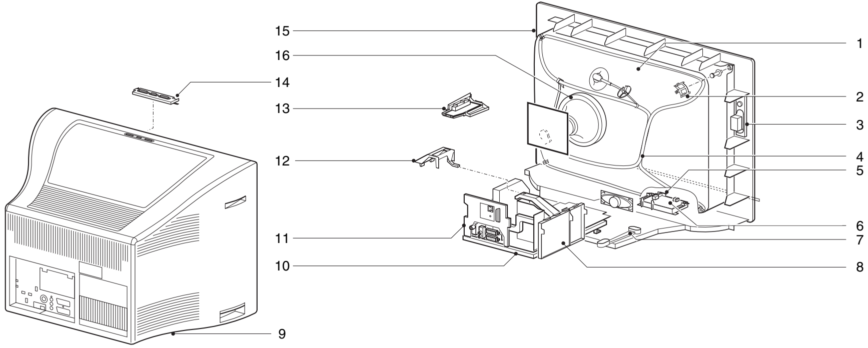
STYLING 520









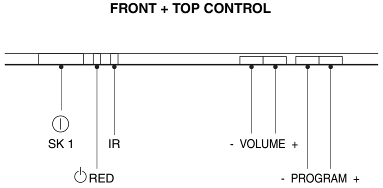


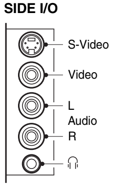
STYLING 520.eps
291004

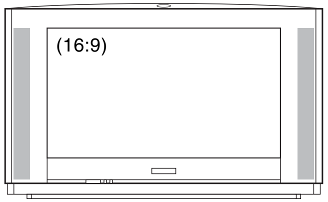
1	9301 899 90301	Picture tube 28” W66ERF042x044
1	9301 967 10306	Picture tube 28” W66ERF172x044
1	9301 924 90314	Picture tube 32” W76ERF062x044
1	9322 173 93682	Picture tube 32” W76EKW10x73
2	4822 404 31341	Coil clamp
3	3104 308 78721	Loudspeaker 10Ω 12W
4	2422 549 44621	Degaussing coil 28”
4	2422 549 44244	Degaussing coil 32”
5a*	3139 177 75621	Mains knob
5b*	3104 308 11041	Mains Knob
6	Not applicable	
7	3104 304 23471	Mains bracket
8	Not applicable	
9a*	3104 308 12451	Rear cover 28”
9a*	3104 308 12461	Rear cover 32”
9b*	3104 308 11231	Rear cover 28”
9b*	3104 308 11221	Rear cover 32”
10	3104 304 23001	Bracket for LSP (Chassis frame)
11	3104 304 21314	Cover plate SCART
12	3104 304 24891	LOT support bracket
13	3104 328 30551	Side I/O
14	3104 328 30571	Top control
15a*	3104 328 33011	Cabinet 28” incl. bottom plate
15b*	3104 328 27771	Cabinet 28”
15a*	3104 328 33021	Cabinet 32” incl. bottom plate
15b*	3104 328 27731	Cabinet 32”
16	Not applicable	
	3104 304 25712	Corner coil bracket short 28” + 32”
	3104 304 25722	Corner coil bracket Long 32”
	3104 304 21091	Corner coil bracket 32”
	3104 304 21031	Rotation coil 32”
	3104 304 25712	Corner coil bracket short 28”

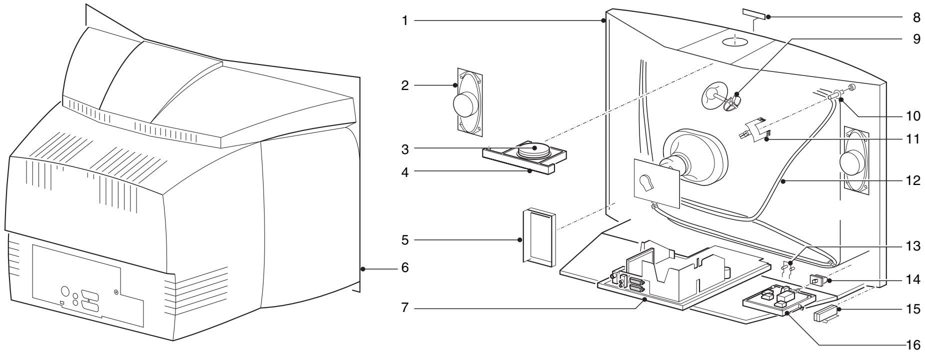
	3139 177 79041	Strip left + lens 28”
	3139 177 77711	Strip left + lens 32”
	3104 308 11201	Strip left + lens 28”
	3104 308 11201	Strip left + lens 32”
	3139 177 79051	Strip right 28”
	3139 177 77701	Strip right 32”
	3104 308 10951	Strip right 28”
	3104 308 10891	Strip right 32”
	3104 304 23041	DAF Bracket
	3104 304 24151	SSB bracket top
	3104 304 24901	SSB bracket bottom
	3104 301 24191	Shielding frame SSB A-side
	3104 301 24201	Shielding frame SSB Z-side
	3104 301 24211	Shielding SSB A-side
	3104 301 24221	Shielding SSB Z-side
	3104 304 26161	Bottom plate
	3111 250 01041	Word mark 28”
	3111 250 01051	Word mark 32”
	4822 321 11425	Mains cord EU
	4622 007 51622	Mains cord UK
	4822 402 11183	Mains cord relief
a*	3139 238 07921	Remote control
b*	3128 147 14411	Remote control
	4822 505 11195	CRT screw 28”
	4822 502 14602	CRT screw 32”
*a	xxPW9309/xx	
*b	xxpw9509/xx	

STYLING 522







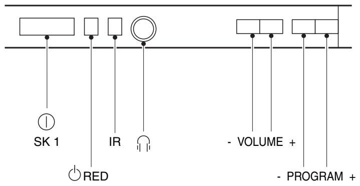


Styling 522.eps
291001

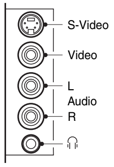
1	3139 177 84511	Cabinet
1c*	3139 124 31561	Cabinet
2	2422 264 00485	Loudspeaker 8Ω 5W
4	3139 124 30381	Top control bracket
4bc*	3139 124 33941	Top control bracket EU
5	3139 124 37662	Side AV bracket
6	3127 107 50111	Rear cover
7	3139 124 61281	Chassis tray
8	3141 050 00291	Word mark PHILIPS
9	3111 254 23481	EHT and degaussing coil clamp
10	4822 502 14602	CRT fixing screw
11	4822 403 70906	Degaussing coil bracket
12	2422 549 00129	Degaussing coil 28”
13	3139 124 31631	Light guide
14	3139 177 72271	Mains knob
14	3139 124 33011	Mains knob shaft
15	4822 404 31291	Mains cord relief
16a*	3139 124 32522	Front interface bracket
16b*	3139 124 32523	Front interface bracket
16c*	3139 124 32521	Front interface bracket
	4822 321 11499	Mains cord EU
	2422 070 98199	Mains cord
	4822 321 11493	Mains cord UK (/05, /25)
	4622 007 51852	Mains cord
	4822 131 11345	Picture tube W66ECK001X14
*a	28PW6008/01	
*b	28PW6008/05	
*c	28PW6008/58	

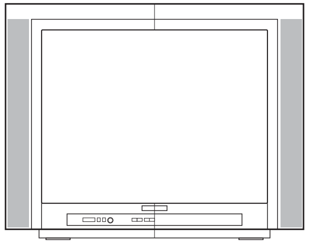
STYLING 523

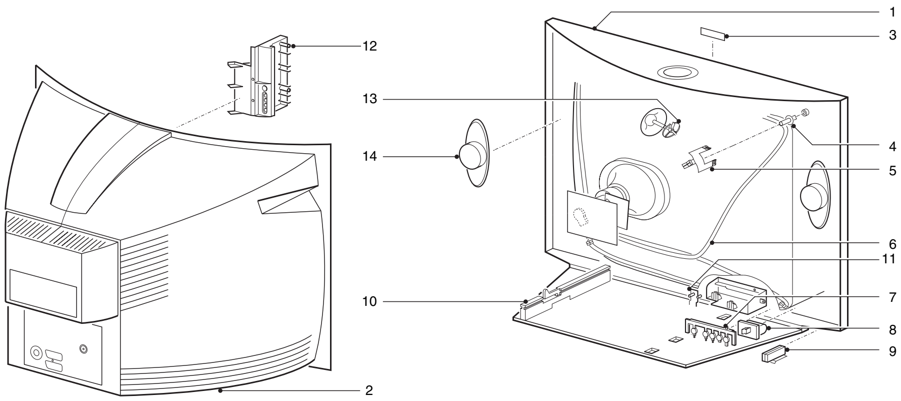
FRONT + TOP CONTROL



SIDE I/O





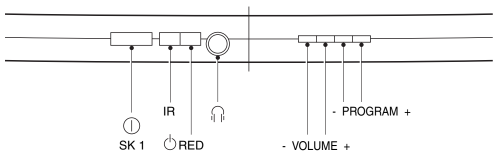


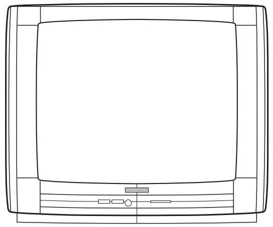
Styling 523.eps
291004

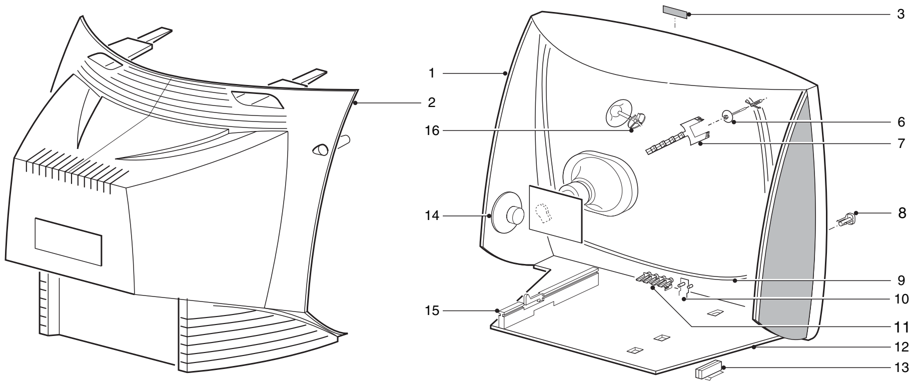
1	3127 107 60161	Cabinet 25”
1cd*	3127 107 60071	Cabinet 28”
1e*	3127 107 60091	Cabinet 28”
2ab*	3127 107 50081	Rear cover
2cde*	3127 107 50091	Rear cover
3	3141 050 00291	Word mark
4	4822 505 11195	CRT fixing screw
5	4822 403 70906	Degaussing coil bracket
6	2422 549 45778	Degaussing coil 25”
6cde*	2422 549 00132	Degaussing coil 28/29”
7c	3139 137 93871	Control knob
7	3139 177 65871	Control knob
7de*	3139 177 65921	Control knob
8	3139 177 65861	Mains knob
8cde*	3139 177 65911	Mains knob
9	4822 404 31291	Mains cord relief
10	3139 124 30881	Chassis guide
11	3139 124 35681	Light guide
11cde*	3139 124 37781	Light guide
12	3139 124 37662	Side AV bracket
13	3111 254 23481	Coil & EHT clamp
14	2422 264 00476	Loudspeaker16Ω W
14e*	2422 264 00485	Loudspeaker 8Ω 5W
ab*	4822 131 11184	Picture tube A59EAK071X11
c*	9301 862 80214	Picture tube A66EAK075X11
de*	9301 863 00301	Picture tube A66EAK075X21
	4822 321 11499	Mains cord EU
	4822 321 11493	Mains cord UK
	4622 007 51852	Mains cord
	2422 070 98199	Mains cord
	4622 009 50501	Mains cord
	3111 257 71441	Stand (silver) UK only

*a	25PT4458/01
*b	25PT4458/05
*c	28PT4458/01
*d	28PT4458/05
*e	28PT5008/01

STYLING 524





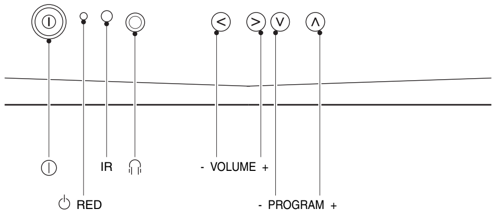


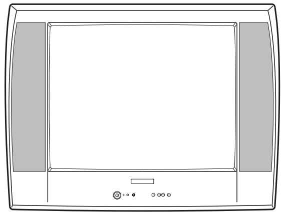
Styling 524.eps
291004

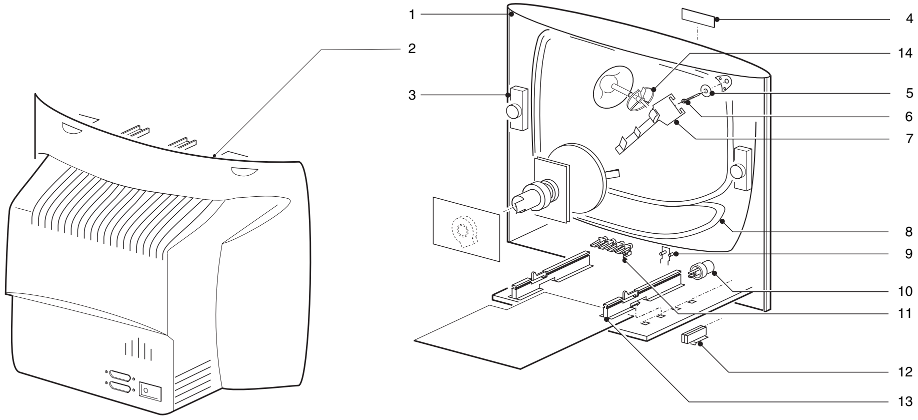
1	3139 177 84411	Cabinet 28”
1c*	3139 177 79521	Cabinet 28”
1de*	3139 177 84471	Cabinet 28”
2	3111 254 25081	Rear cover 28”
2c*	3139 124 60081	Rear cover 28”
2de*	3139 124 49151	Rear cover 28”
3de*	3141 050 00291	Word mark
4	Not applicable	
5	Not applicable	
6cd*	4822 505 11195	CRT fixing screw
6abe*	3104 308 77012	CRT fixing screw
7	4822 403 70906	Degaussing coil bracket
8	3139 137 90651	Mains knob
8bcd*	3139 177 84441	Mains knob
9bcdef*	2422 549 00132	Degaussing coil 28”
10	3139 124 37111	Light guide
11	3139 137 90661	Control knob
11cde*	3139 177 84431	Control knob
12	Not applicable	
13	4822 404 31291	Mains cord relief
14	2422 264 00499	Loudspeaker 16Ω 10W
15	3139 124 30881	Chassis guide (VO)
16	4822 401 11765	Coil & EHT clamp
	4822 321 11499	Mains cord EU
	2422 070 98199	Mains cord
	4622 009 50501	Mains cord
	2422 070 98238	Mains cord UK
	4622 009 50481	Mains cord UK
	4822 131 11045	Picture tube A66EAK071X11
	9322 147 09682	Picture tube A66EMZ43X07 (…/21)
	9301 862 80214	Picture tube A66EAK075X11

*a	28HT5404/01Z
*b	28HT5404/05Z
*c	28PT4408/01
*d	28PT4418/01
*e	28PT4418/05

STYLING 525







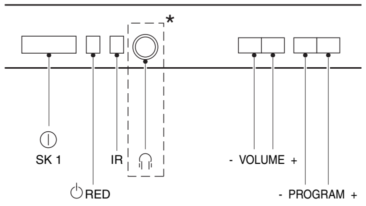
STYLING 525.eps
291004

1	3127 107 60111	Cabinet 25”
1bc*	3127 107 60101	Cabinet 25”
2	3111 254 25571	Rear cover 25”
2bc*	3111 254 25071	Rear cover 25”
3	2422 264 00333	Loudspeaker 16Ω 5W
4	3111 250 00201	Word mark Philips
5	3111 254 23481	Coil & EHT bracket
6	3139 124 30881	CRT fixing screw
6bc*	3104 308 77012	CRT fixing screw
7	4822 403 70906	Corner coil bracket
7bc*	3104 304 14414	Corner coil bracket
8	2422 549 45778	Degaussing coil 25”
9	3139 124 25601	Light guide
10	3139 137 96621	Mains knob
11	3139 137 96611	Control knob
12c	3122 224 04623	Mains cord relief
12	4822 404 31363	Mains cord relief
13	3139 124 30871	Chassis guide right (HB)
14	3139 124 30881	Chassis guide left (VO)
	9322 147 09682	Picture tube 25" A59EMZ43X07

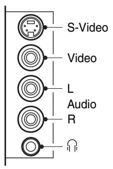
	9301 710 90314	Picture tube 25” A59EAK071X11
	4822 321 11499	Mains cord EU
	4822 321 11493	Mains cord UK
	2422 070 98199	Mains cord UK
	4622 009 50501	Mains cord EU
*a	25HT5405/01B	
*b	25HT5405/01Z	
*c	25HT5405/05Z	

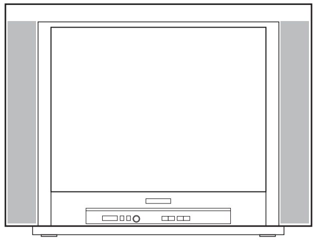
STYLING 528

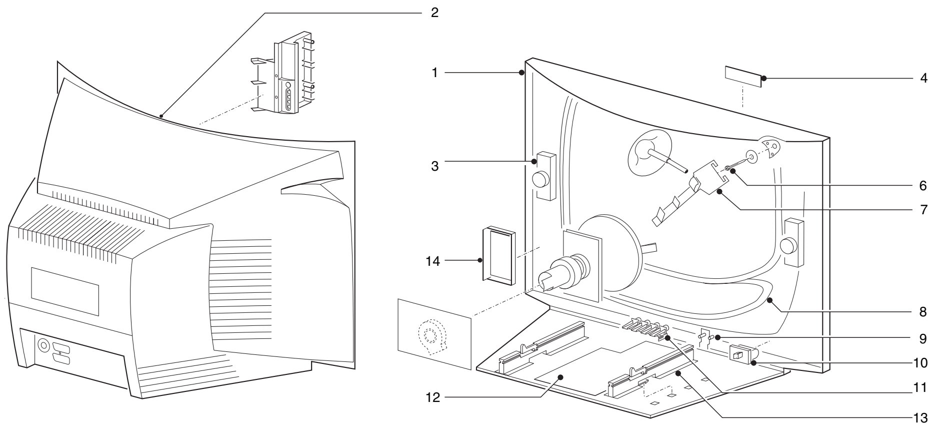
FRONT + TOP CONTROL



SIDE I/O





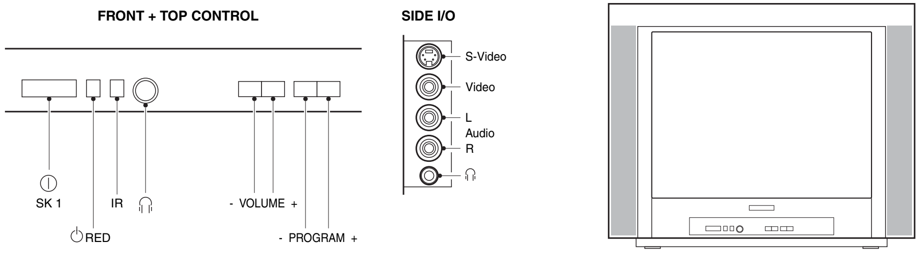


*Not applicable for 21PT5408

Styling 528.eps
291004

1	3139 177 02140	Cabinet 21"
1a*	3139 177 67451	Front Cabinet 21” (HP+3AV)
2	3141 054 22611	Rear cover 21"
3	2422 264 00411	Loudspeaker 16Ω 5W
4	3139 120 01371	Word mark (silver)
4a*	3141 050 00331	Word mark
5	4822 404 31291	Mains cord relief
6	4822 505 11195	CRT fixing screw
7	3139 124 33472	Degaussing coil bracket
8	3139 128 23841	Degaussing coil 21"
9	3139 124 32221	Light guide
10	3139 124 34021	Mains knob
10a*	3139 137 94231	Mains knob
11	3139 124 36311	Control knob
11a*	3139 137 94241	Control knob
12	3139 124 33341	VO plate
13	3139 124 46311	Chassis guide (V0)
14	3139 124 37671	Side I/O bracket 21SDRF(HP+3P)
	9301 903 43301	Picture tube A51ERF135X80
	3139 128 76161	Mains cord
	20PT6331/37C	
a*	20MS3341/37C	

STYLING 529


FRONT + TOP CONTROL
SIDE I/O
SK 1
RED
IR
- VOLUME +
- PROGRAM +
S-Video
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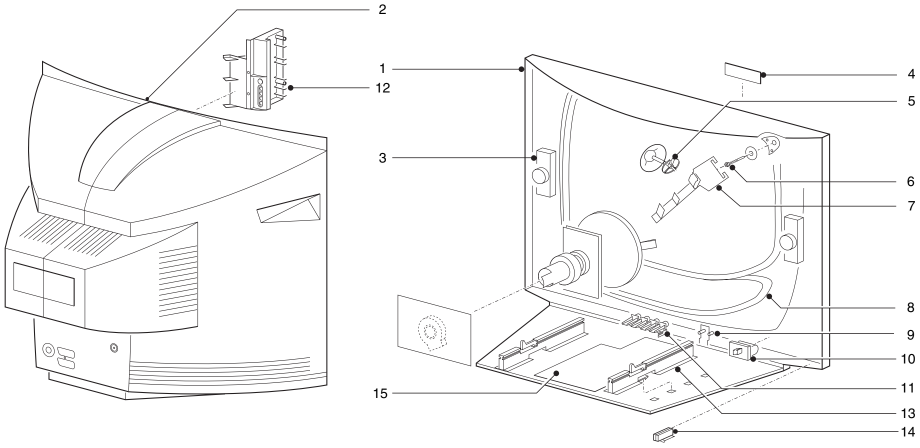
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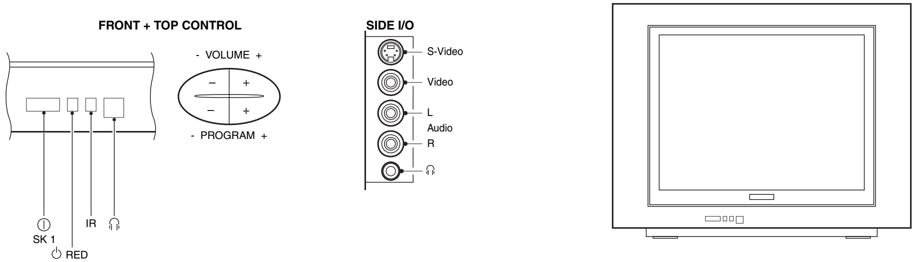
STYLING 529.eps
291004

1	3139 177 58461	Cabinet
2	3139 124 42191	Rear cover NAFTA
3	2422 264 00411	Loudspeaker 16Ω 5W
4	3139 120 01371	Word mark (metal silver)
5	3139 124 23861	EHT spacer
6	4822 502 14508	CRT fixing screw/washer
7	3141 054 22351	Cable tie
8	3141 058 20131	Degaussing coil 21" US
9	3139 124 34401	Light guide
10	3139 177 58441	Mains Knob
11	3139 177 58431	Control knob USA
12	Not applicable	
13	3139 124 30811	Chassis guide (VO)
14	Not applicable	
15	3139 120 21491	VO plate
	9322 202 00682	Picture tube A51KQK99X02
	20L140/37C	

STYLING 530


FRONT + TOP CONTROL
SIDE I/O
- VOLUME +
- PROGRAM +
SK 1
RED
IR
S-Video
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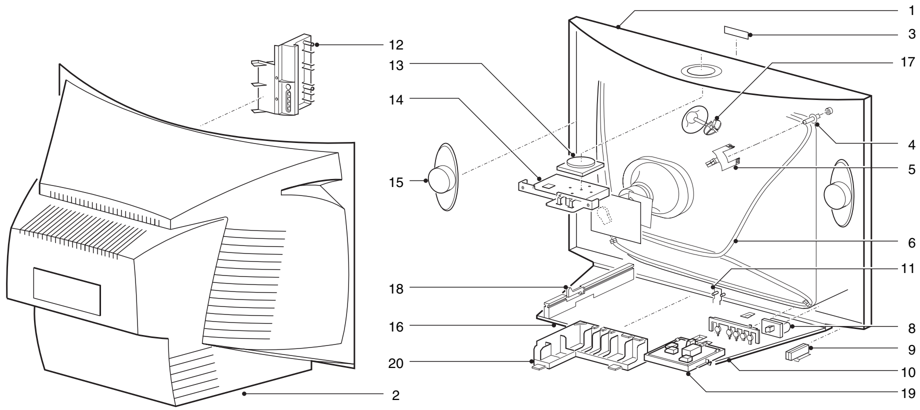
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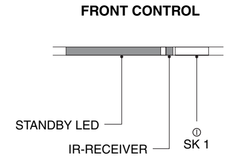
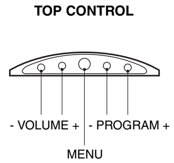
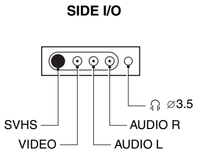
STYLING 530.eps
291004

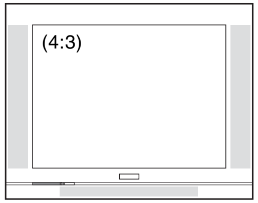
1	3139 177 65671	Cabinet
2	3141 054 22521	Rear cover (12AV+SVHS) US
3	3139 120 01371	Word mark
4	4822 505 11195	CRT fixing screw
5	3141 054 22351	Cable tie
6	3139 128 23841	Degaussing coil
7	Not applicable	
8	3139 124 34021	Mains knob
9	Not applicable	
11	3139 124 32221	Light guide
13	3139 137 66921	Top control cover
14	3139 124 30381	Top control bracket
15	2422 264 00411	Loudspeaker 16Ω5W
16	Not applicable	
17	4822 532 61201	EHT spacer
18	3139 124 46311	Chassis guide (VO)
19	Not applicable	
20	Not applicable	
	9301 903 43301	Picture tube A51ERF135X80
	20PT6431/37C	

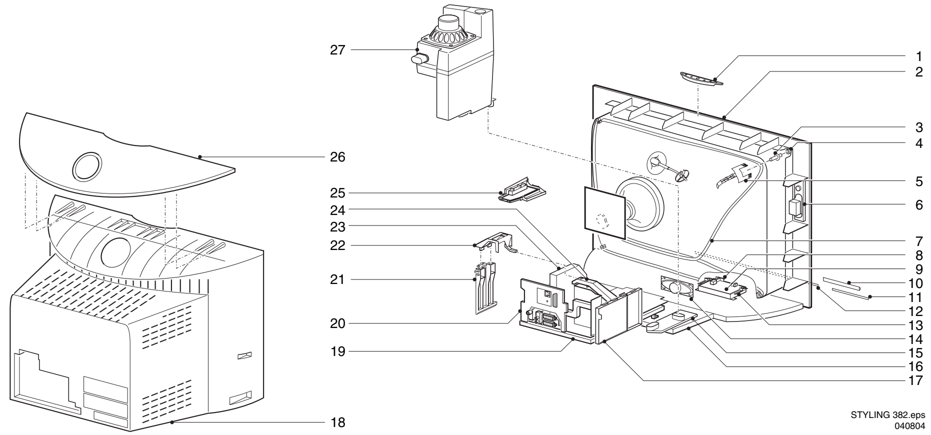
STYLING 534







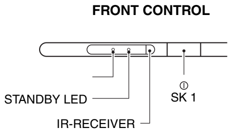


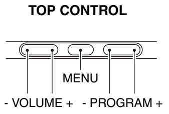


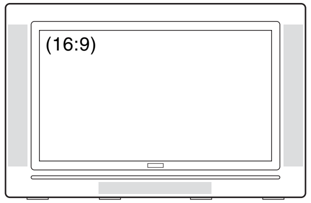
STYLING 382.eps
040804

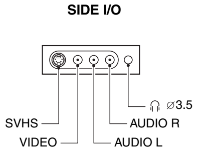
1	3104 328 35561	1114	Top control assy
2	3104 328 35271	0005	Cabinet 29"
2	3104 328 35311	0005	Cabinet 34"
3	4822 500 30034	0014	CRT screw
4	4822 404 31294	0008	CRT fixing insert (VP19000)
5	3139 124 31122	0020	Bracket degaus. coil 29" (4x)
5	3139 124 32811	0020	Bracket degaus. coil 34" (4x)
6	2422 264 00429	5213	L/R loudspeaker (2x)
7	2422 549 44579	5203	Degaus. coil 29" (/56r, /69,)
7	3104 308 20361	5203	Degaus. coil 34" (/56r, /69,)
8	3104 308 13121	0049	Mains knob assy
9	3104 328 35571	1160	Mains assy
10	3104 304 23461	0041	Light guide
11	3104 308 13091	0046	Deco strip short 29"
11	3104 308 23101	0046	Deco strip short 34"
12	3104 308 13131	0047	Deco strip Long 29"
12	3104 308 23141	0047	Deco strip Long 34"
13	3104 304 23471	0046	Bracket Mains Switch panel
14	2422 264 00431	5215	Centre loudspeaker (1x)
15	3104 304 24241	0063	Subwoofer support bracket
16	3104 304 23501	0032	Bottom plate 29”
17	3104 304 23041	0034	Bracket for DAF panel
18	3104 307 97501	0010	Rear cover assy 29"
18	3104 307 97491	0010	Rear cover assy 34"
19	3104 304 23001	0030	Bracket for LSP
20	3104 328 30063	1126	Jack panel
21	3104 304 24141	0075	Bracket for SSB bottom support
22	3104 304 24151	0038	Bracket for SSB top support
23	3104 301 24191	0072	Shielding frame SSB (A-side)
23	3104 301 24201	0075	Shielding frame SSB (Z-side)
23	3104 301 24211	0073	Shielding cover SSB (A-side)
23	3104 301 24221	0074	Shielding cover SSB (Z-side)
24	3104 304 24131	0072	LOT support bracket
25	3104 328 26751	1116	Side I/O assy
25	3104 304 23481	0205	Side I/O bracket
26	3104 307 97561	0008	V0 Top cover 29"
26	3104 307 97551	0008	V0 Top cover 34"
27	3104 130 02221	5210	Subwoofer box
	3104 304 22432	0065	Bracket PIP/3D-comb panel
	3139 124 39581	0022	Bracket Rotation coil 29"
	3128 138 60661	5205	Rotation coil
	9322 160 15682	1099	Picture tube 29" A68QCP891X501 (/69)
	9322 160 14682	1099	Picture tube 29" A68QCP891X500 (/56r)
	9322 213 83682	1099	Picture tube 29" A68QCP691X500 (/93r)
	9301 978 20542	1099	Picture tube 34" A80ERF042X45H (/56r, /93)
	9301 978 30542	1099	Picture tube 34" A80ERF042X46H (/69)
	3128 147 14411	1850	Remote RC4301/01B
	4822 321 11493	8190	Mains cord (/56r)
	4822 321 11499	8190	Mains cord (/69)
	4622 006 06061	8190	Mains cord (/93)
	4822 402 11183	1406	Mains cord holder
	3104 300 12311	0051	Matchline emblem
	3104 300 12231	0050	Word mark 29" PHILIPS
	3104 300 12241	0050	Word mark 34" PHILIPS
	29PT9421/xx		
	34PT9421/xx		
	29PT9221/xx		

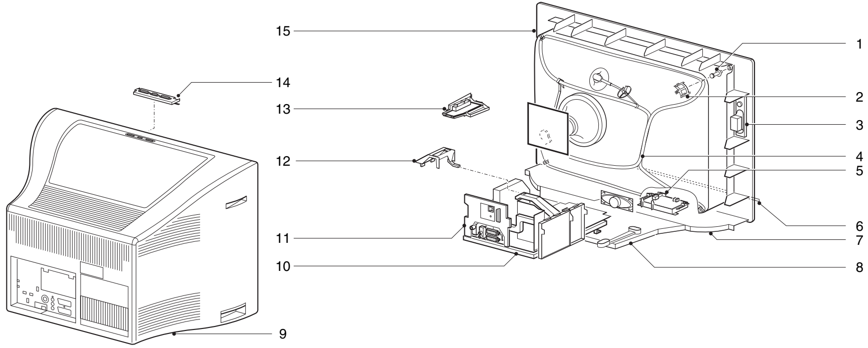
STYLING 535











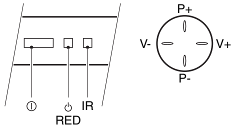
STYLING 535.eps
020305

1	3119 107 05142	Cabinet 28”
2a*	3111 254 25081	Rear cover
2b*	3111 254 25091	Rear cover
3	3111 250 00201	Word mark
4	3139 124 38211	Mains harmonic bracket
5	3119 107 17651	EPS bracket
6	4822 505 11195	CRT fixing screw
7	4822 403 70906	Corner coil bracket
8	3139 137 90651	Mains knob
9	4822 157 11762	Degaussing coil 28”
10	3139 124 37111	Light guide
11	3139 137 90661	Control knob
12	3139 124 30571	No system card cap
13	4822 404 31291	Mains cord relief
14a*	2422 264 00398	Loudspeaker 16Ω 5W
14b*	2422 264 00414	Loudspeaker 8Ω 5W
15	3139 124 30881	Chassis guide
16	4822 401 11765	Coil & EHT clamp
	4822 131 11045	Picture tube A66EAK071X11
	4822 321 11499	Mains cord EU
	4822 321 11493	Mains cord UK

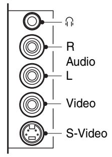
*a 28HT5404
*b 28HT5304

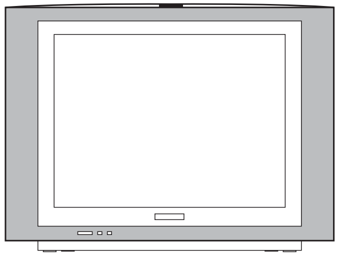
STYLING 536

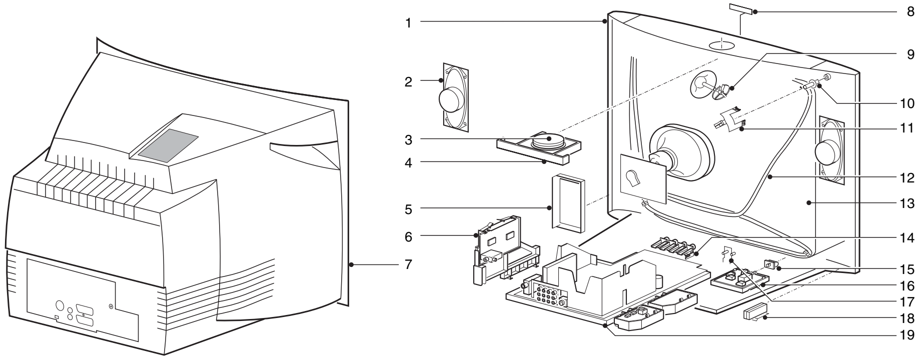
FRONT + TOP CONTROL



SIDE I/O







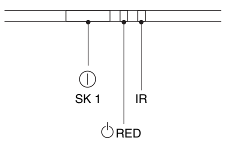
Styling 536.eps
100205

1acde*	3141 047 66001	Cabinet 29”
1bi*	3141 057 65231	Cabinet 29”
1fgh*	3141 047 66361	Cabinet 34"
2abcdei*	2422 264 00379	Loudspeaker 8Ω 10W
2fgh*	2422 264 00444	Loudspeaker 8Ω 10W
3	3139 137 66921	Top control button
4	3139 124 30381	Top control bracket
5	3139 124 39541	Side AV bracket
6	Not applicable	
7abcde*	3139 124 37231	Rear cover 29"
7fgh*	3139 124 44831	Rear cover 34"
7i*	3141 057 65241	Rear cover 29”
8acde*	3141 050 00361	Word mark
8bi*	3141 050 00291	Word mark
8fgh*	Not applicable	Word mark
9abcde*	3141 054 22011	EHT spacer
9fghi*	4822 532 61201	EHT spacer
10	4822 502 14602	CRT fixing screw
11fgh*	3141 054 22351	Corner coil bracket
11abcdei*	Not applicable	
12abcdi*	3139 128 23781	Degaussing coil 29"
12e*	4822 157 11551	Degaussing coil 29"
12fgh*	3139 128 23821	Degaussing coil 34"
13abei*	9322 173 75682	Picture tube A68QCP893X001
13cd*	9322 196 06682	Picture tube A68QDL281X062
13f*	9301 927 10542	Picture tube A80ERF042X14
13gh*	9301 927 30542	Picture tube A80ERF042X15
14	Not applicable	
15abcdei*	3139 138 14831	Mains knob
15fgh*	3139 124 30401	Mains knob
16	3139 124 30431	Front interface bracket
17abcde*	3139 124 30411	Light guide
17fgh*	Not applicable	
18	4822 404 31363	Main cord relief
19	3139 124 33531	Chassis tray
abc*	3139 128 75211	Mains cord
dh*	3139 128 75291	Mains cord
e*	3139 128 75230	Mains cord
fg*	2422 070 98199	Mains cord

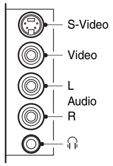
*a	29PT4323/69S/56R
*b	29PT5307/60
*c	29PT4323/69R
*d	29PT4323/71R
*e	29PT4323/79R
*f	34PT4323/56R
*g	34PT4323/69R
*h	34PT4323/71R
*I	29PT5307/60S

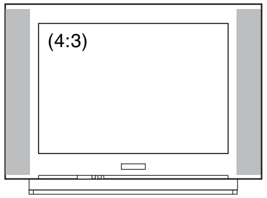
STYLING 537

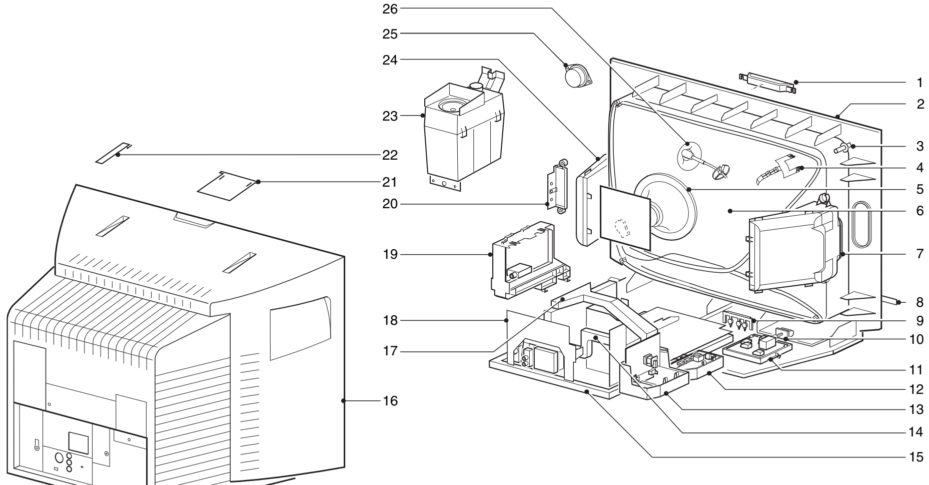
FRONT + TOP CONTROL



SIDE I/O





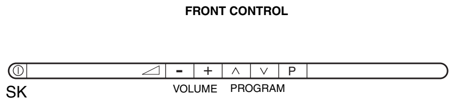


STYLING 537.eps
100205

1abc*	3139 138 12751	Top control assy 29"/34"
1de*	3139 126 40591	Top control
2ab*	3139 138 19011	Cabinet assy 29" (/57, /69, /79)
2ab*	3139 138 19411	Cabinet assy 29" (/61, /71)
2c*	3139 138 19101	Cabinet assy 34" (/56, /57, /69, /79)
2c*	3139 138 19401	Cabinet assy 34" (/61, /71)
3	3111 250 40031	CRT screw
4ab*	3139 124 31122	Bracket for Degaussing coil 29"
4c*	3139 124 32811	Bracket for Degaussing coil 34"
5ab*	3128 138 60652	Rotation coil 29"
5c*	3128 138 60642	Rotation coil 34"
5ab*	3139 124 39581	Bracket for rotation coil 29"
6ab*	9322 160 14682	CRT 29" (/56, /57, /61)
6b*	9322 160 15682	CRT 29" (/69, /71)
6b*	9322 160 16682	CRT 29" (/79)
6c*	9322 185 70682	CRT 34" (/56, /57,)
6c*	9322 185 75682	CRT 34" (/61, /69, /71, /79)
7ab*	3139 128 76611	Speaker & box assy (right)
7c*	2422 264 00379	Speaker (full range)
7de*	2422 264 00484	Loudspeaker
8ab*	3141 050 00161	Word mark PHILIPS 29"
8c*	3141 050 00141	Word mark PHILIPS 34"
8de*	3141 050 00281	Word mark PHILIPS 34”
9	3139 124 39211	Light guide
10	3139 138 10681	Mains knob assy
10d*	3139 177 69561	Push button
11	3139 124 32522	Bracket for Mains Switch panel
12	3139 124 33211	Bracket for Mains Harmonic panel
13	3104 304 21653	Bracket for DAF/DC-shift panel
14	3104 304 21603	Connector support bracket
15	3104 304 22832	Bracket for Large Signal panel
16a*	3139 124 39741	Rear cover 29" (/57)
16b*	3139 124 39331	Rear cover 29" (/57, /69, /79)
16b*	3139 124 40661	Rear cover 29" (/61, /71)
16c*	3139 124 40001	Rear cover 34" (/56, /57, /69, /79)
16c*	3139 124 39991	Rear cover 34" (/61, /71)
16d*	3138 124 49811	Rear cover 34” (/93R)
17	3104 304 21114	LOT & SSB support bracket
17c*	3104 304 22073	Bracket for Multi Voltage panel
17d*	3139 124 46811	LOT bracket L04
18b*	3139 124 42411	Cinch cover plate (/61, /71)
19bc*	3104 304 23801	Bracket for DW/PIP panel
20	3139 124 40131	Bracket for Side I/O panel
21	3139 124 39161	V0 plate for rear cover
22ab*	3139 124 39301	Screw cap for rear cover 29"
22cd*	3139 124 39241	Screw cap for rear cover 34"
23	3139 128 76491	Subwoofer box
24ab*	3139 128 76601	Speaker & box assy (left)
24c*	2422 264 00379	Speaker (full range)
25ab*	2422 264 00388	Tweeter 8Ω 8W
26	3114 311 03722	EHT cable
ab*	3139 128 23451	Degaussing coil 29" (/57, /69, /79)
ab*	3139 128 23781	Degaussing coil 29" (/61, /71)
c*	3139 128 23821	Degaussing coil 34"
de*	3104 308 20581	Degaussing coil 34"
	3104 308 73703	Wire focus cable (black)
	3104 308 73692	Wire focus cable (red)
	3104 308 73224	Antenna IEC cable
	3139 124 26301	Mains cord relief
	4822 404 31363	Mains cord relief
	3139 128 75223	Mains cord (/57)
	3139 128 75251	Mains cord (/61)
	3139 128 75201	Mains cord (/56, /69)
	3139 128 75291	Mains cord (/71)
	3139 128 75232	Mains cord (/79)
	3139 124 23051	Mains cord (/93R)
	3104 327 00021	Remote control (/56, /57, /69, /79)
	3104 327 00031	Remote control (/61, /71)
	3139 228 86452	Remote control (/93R)
	3104 304 24111	SSB snap
	1322 504 97401	Grease for EHT cap

*a	29PT8320/xxR
*b	29PT8420/xxR
*c	34PT8420/xxR
*d	34PT4524/93R
*e	34HT3312/93R

STYLING 539


FRONT CONTROL
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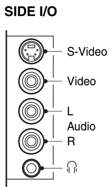
PROGRAM


SIDE I/O
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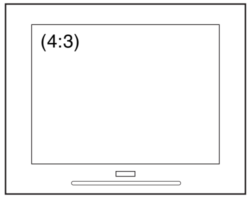

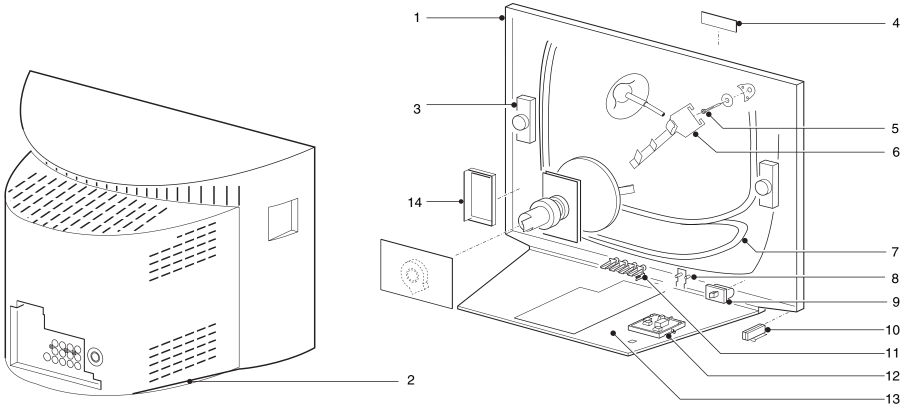
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STYLING 539.eps
040205

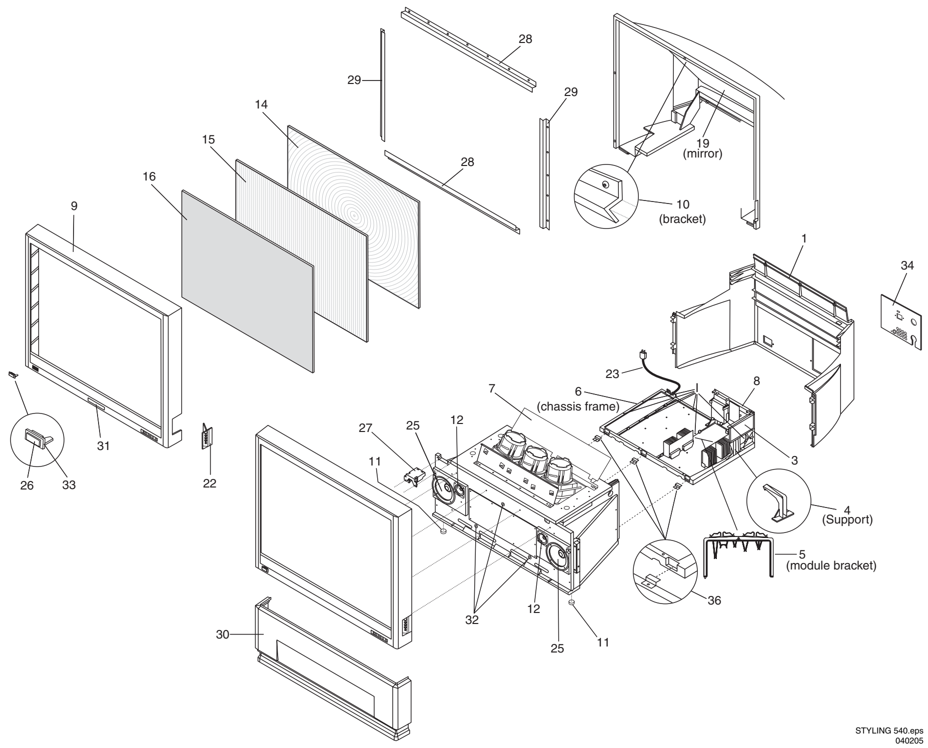
1	3141 047 80681	Cabinet
2	3139 177 81181	Rear cover
3	2422 264 00409	Loudspeaker 8Ω 5W
4	3141 050 00291	Word mark
5	4822 502 14602	CRT fixing screw
6	Not applicable	
7	3139 128 23381	Degaussing coil
8	3139 124 30411	Light guide
9	3139 177 80651	Mains knob
10	Not applicable	
11	Not applicable	
12	Not applicable	
13	4822 463 11225	Chassis guide (HB)
13	4822 463 11226	Chassis guide (VO)
14	3139 124 40131	Side AV bracket
15	Not applicable	
	9301 946 60542	Picture tube A68QCU770X73(N)

29PT3324/93R

Personal Notes:

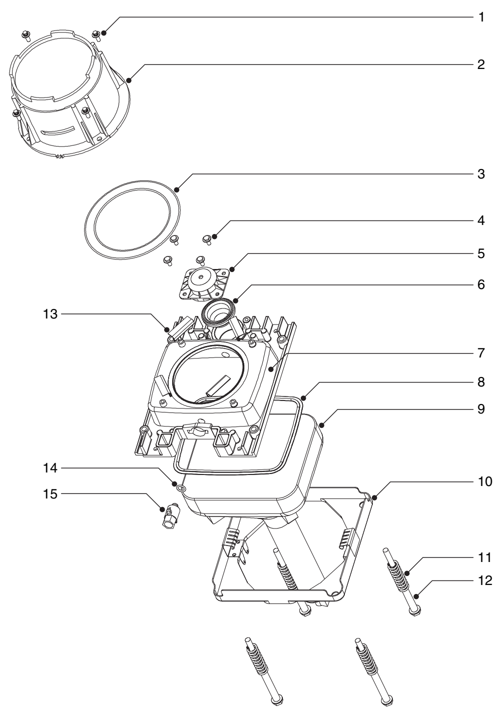
E_06532_012.eps
131004

STYLING 540a



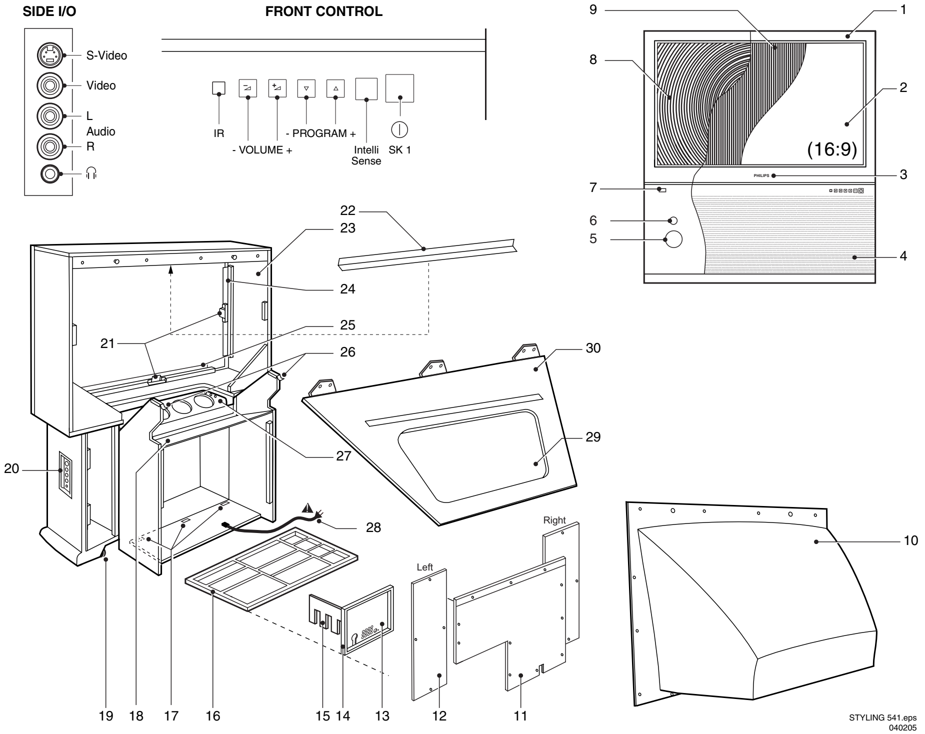
1	3135 034 04202	Rear cover
2	3135 037 51751	Rear upper assembly
3	Not applicable	
4	Not applicable	
5	3135 034 05131	Bracket Module
6	3135 034 01991	Frame Chassis
7	3135 033 01361	Barrier Rear 43V
8	3135 034 02533	Frame Rear Jack
9	3135 037 54502	Cab Front ASSY 2k4
10	3135 011 04611	Bracket Mirror MTG 43A10PTV
10	3141 051 20471	Mirror Bracket side 43 left
10	3141 051 20481	Mirror Bracket side 43 right
11	3135 010 09741	Foot
12	Not applicable	
14	3141 083 20021	Fresnel lens
15	Not applicable	
16	3141 083 20011	Lenticular lens
19	3135 034 90101	Mirror
22	3135 037 54861	ASSY Side Jack AP
23	2422 070 98154	Mains cord CHN
25	2422 264 00497	Loudspeaker
26	3135 014 10421	Button
27	3135 037 50981	Button Vacation
28	3135 034 01452	Retainer screen H no filt 43V
29	3135 034 01461	Retainer screen V no filt 43V
30a	3135 037 54521	Grille, Plastic
30b	3135 037 54801	Grille, Plastic
30c	3135 037 55431	Grille, Plastic
31	3135 030 00471	Word mark PHILIPS 62MM 11007
32	3135 013 02761	Baffle mounting cup
33	3135 034 04531	Bracket vacation switch
34	3135 030 00451	Label JP NPIP AP
	3135 038 70081	Solar Cell Assembly
	9322 202 91682	CRT P16LXL00RFA(C)
	9322 202 92682	CRT P16LXL00HHA(C)
	9322 202 93682	CRT P16LXL00BMB(C)
	9965 000 23140	Convergence template 43" 4/3
*a	43PP8445/93	
*b	43PP8446/93	
*c	43PP8447/93	

STYLING 540b



1	3135 010 02971	Screw (lens to coupler)
2	3135 034 00731	Lens C-element green
2	3135 034 00721	Lens C-element red-blue
3ab*	3135 013 02632	Seal lens
3c*	3135 013 02632	Seal lens
4	3135 010 02981	Screw
5	3135 014 02681	Cap coupler
6	4822 418 10413	Expansion diaphragm
7	3135 031 60011	Coupler CRT-LENS 43V
7	3135 031 60021	Coupler green
8	4822 532 13123	Seal CRT
9	9322 202 91682	Projection tube P16LXL00RFA(C)
9	9322 202 92682	Projection tube P16LXL00HHA(C)
9	9322 202 93682	Projection tube P16LXL00BMB(C)
10	3135 031 20651	CRT BKT-APRG ASSY AP
11	4822 492 11733	Compression spring
12	3135 010 08101	Screw
13	3135 014 02811	CRT pad
14	4822 530 10519	O-ring
15	4835 432 17791	Plug vent
*a	43PP8445/93	
*b	43PP8446/93	
*c	43PP8447/93	

STYLING 541a

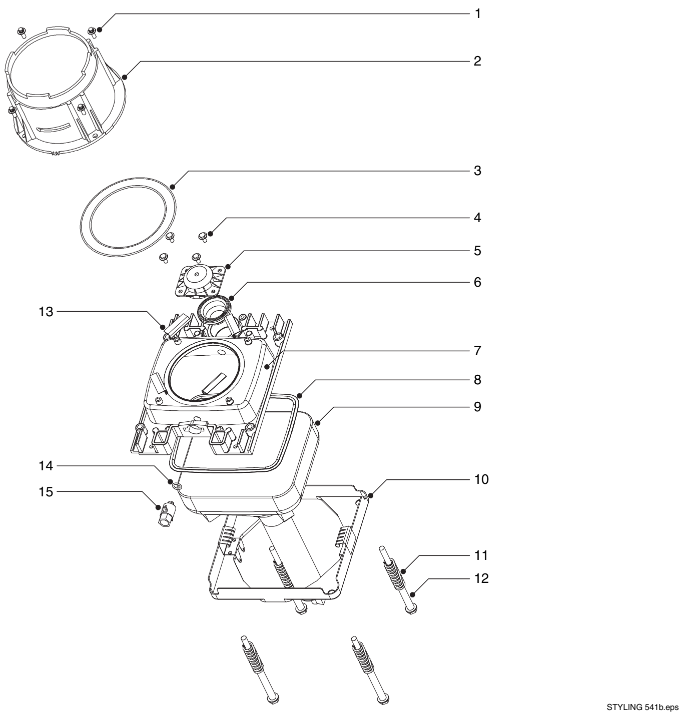


STYLING 541.eps
040205

1a*	3135 037 53931	Screen Frame 46w
1b*	3135 037 55091	Frame Screen 46W
1c*	3135 037 53951	Screen Frame ASSY 50V
1d*	3135 037 72631	Screen Frame 55W
1e*	3135 037 55081	Screen Frame 55W
2d*	3135 034 00922	Protective Screen HDR 50W-AP
3	3135 030 00471	Word mark PHILIPS 62MM 11007
4	3135 037 54581	Shield, Protective, Plastic
4bde*	3135 011 04141	Shield, cover
5	2422 264 00452	LSP 25w tweeter
5ac*	2422 264 00497	Speaker
6	2422 164 00453	LSP 8Ω 25W woofer
6	3135 034 13691	Button vacation
7ac*	3135 037 50981	Button vacation
7d*	3135 034 00691	Button
8	3135 033 20181	Fresnel lens 46”
8	3135 033 20191	Fresnel lens 50”
8	3135 033 20201	Fresnel lens 55”
9	3135 033 20061	Lenticular 46”
9	3135 033 20071	Lenticular 50”
9	3135 033 20081	Lenticular 55”
10	3135 034 02061	Rear cover 46”
10	3135 034 02211	rear cover, upper back 50”
10	3135 034 00791	Back cover-AP 55”
11	3135 033 00321	Rear cover 46”
11	3135 033 00801	rear cover, back lower
11	3135 033 00321	lower back 55”
12	3135 033 00961	Cover speaker 46”AP
12	3135 033 00811	Cover speaker 50”
12	3135 033 00951	Cover speaker EMG STAR 55” AP
13ac*	3135 030 00321	Label JP NPIP AP
14	3135 034 02532	Frame rear jack
14be*	3135 034 01033	Frame rear jack
14d	3135 034 02542	Frame rear jack
15bde	3135 014 10062	PIP A10 frame
16	3135 034 01991	Frame Chassis
17	3135 011 02011	Holdwn bracket chassis
18	3135 033 01031	Barrier Rear 46” AP
18	3135 033 00671	Barrier Rear 50”
18	3135 033 01041	Barrier rear 55”
19	3135 030 40031	Caster
20	3135 037 50731	Panel Side Jack
21	3135 038 70081	Solar Cell Assembly
22	3135 011 03641	Rail 50" to 55"
22	3135 011 01623	Rail 60”-64"
23	3135 037 55481	ASSY Cabinet 46”
23	3135 037 72573	ASSY Cabinet 55”
24ab*	3135 034 04111	scrn rtnr vert no filt 578
24c*	3135 034 04101	Scrn rtnr vert no filt 770
24d*	3135 034 03311	Scrn rtnr vert side 690
24e*	3135 034 04091	Scrn rtnr vert no filt 690
25ab*	3135 034 04121	Scrn rtnr horiz no filt 1056
25c*	3135 034 01121	Scrn rtnr horiz no filt 1056
25d*	3135 034 03291	Scrn rtnr horiz top 1260
25	3135 034 03301	Scrn rtnr horiz bottom 1260
25e*	3135 034 04081	Scrn rtnr horiz no filt 1260
26	3135 011 03003	Bracket mirror support
27	3135 034 00891	Barrier Light
28	2422 070 98154	Mains cord CHN
29	3135 034 90051	Mirror 46"
29	3135 034 90021	Mirror 50"
29	3135 034 90061	Mirror 55"
30	3135 033 00461	Mirror BD 46”
30	3135 033 00651	Mirror board
	3104 327 00021	RCS82D SBHV00030A
	3128 147 13991	RC2049/01B
	9322 202 91682	CRT P16LXL00RFA(C)
	9322 202 92682	CRT P16LXL00HHA(C)
	9322 202 93682	CRT P16LXL00BMB(C)
	9322 173 22682	Pict.pube P16LTG00RFA
	9322 173 21682	Pict.pube P16LTG00HHA
	9322 173 23682	Pict.pube P16LTG00BMB

*a	46PP8745/93
*b	46PP9545/93
*c	50PP8545/93
*d	55PP9527/93
*e	55PP9545/93

STYLING 541b

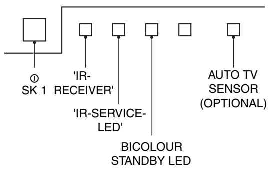


STYLING 541b.eps
040205

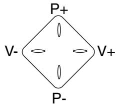
1	3135 010 02971	Screw (lens to coupler)
2	3135 034 00731	Lens C-element green
2	3135 034 00721	Lens C-element red-blue
3	3135 013 02632	Seal lens
4	3135 010 02981	Screw
5	3135 014 02681	Cap coupler
6	4822 418 10413	Expansium diaphragm
7	3135 011 03633	Coupler,RED&BLUE
7de*	3135 031 60021	Coupler green
8	4822 532 13123	Seal CRT
9	9322 202 91682	CRT P16LXL00RFA(C)
9	9322 202 92682	CRT P16LXL00HHA(C)
9	9322 202 93682	CRT P16LXL00BMB(C)
9d*	9322 173 22682	Pict.pube P16LTG00RFA
9d*	9322 173 21682	Pict.pube P16LTG00HHA
9d*	9322 173 23682	Pict.pube P16LTG00BMB
10	3135 031 20651	CRT BKT-APRG ASSY AP
11	4822 492 11733	Compression spring
12	3135 010 08101	Screw
13	3135 014 02811	CRT pad
14	4822 530 10519	O-ring
15	4835 432 17791	Plug vent

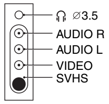
*a	46PP8745/93
*b	46PP9545/93
*c	50PP8545/93
*d	55PP9527/93
*e	55PP9545/93

STYLING 542

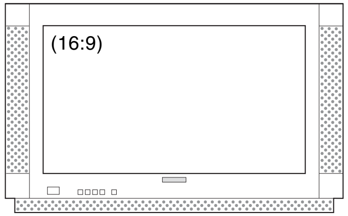


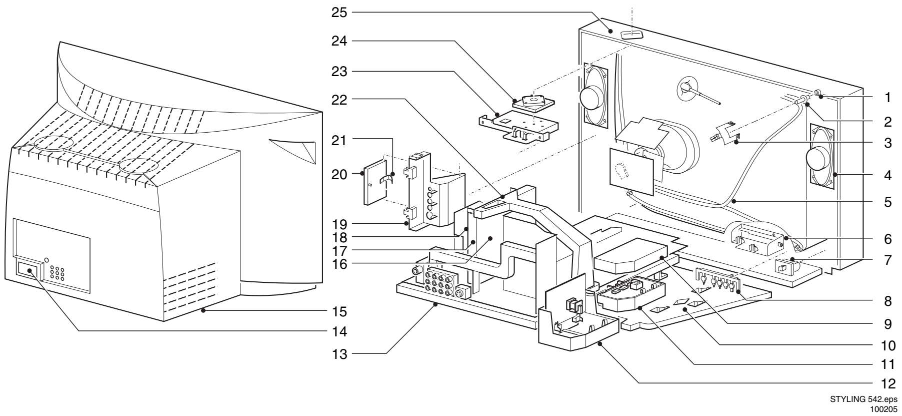
SK 1
'IR-RECEIVER'
'IR-SERVICE-LED'
BICOLOUR STANDBY LED
AUTO TV SENSOR (OPTIONAL)





∅3.5
AUDIO R
AUDIO L
VIDEO
SVHS





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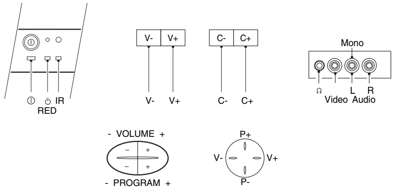
STYLING 542.eps
100205

1a*	3104 308 77012	CRT screw 28”
2	Not applicable	
3	4822 403 70906	Bracket fix deg. coil
4	2422 264 00491	Loudspeaker
5	2422 549 00129	Degaussing coil 28”
5b*	2422 549 00128	Degaussing coil 32”
6	3104 304 21853	Bracket mains unit
7	3139 177 57661	Mains knob
8	3104 304 21871	Light guide
9	3104 304 22312	Cover
10	3104 304 22012	Bottom plate
11	Not applicable	
12	Not applicable	
13	3104 124 61231	Chassis tray
14	3104 304 22312	Service connector cover
15	3104 308 10221	Rear cover
15b*	3104 307 96252	Rear cover
16	Not applicable	
17	Not applicable	
18	Not applicable	
19	3104 304 21932	Bracket for Side I/O panel
20	3104 304 21912	Door Side I/O
21	3104 301 23972	Metal spring for door
21	3104 308 70381	Locking unit for door
22	3104 304 23011	Bracket for LOT/SSB
23	Not applicable	
24	3104 304 22561	Top Control keypad
25	3143 027 61891	Cabinet assy
25*b	3104 027 61871	

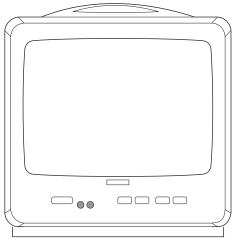
3141 050 00291	Word mark
3104 050 00281	Word mark
9301 967 10307	Picture tube W66ERF172X044
9301 982 90314	Picture tube W76ERF182X044
4822 321 11499	Mains cord
4822 402 11183	Mains cord holder
3139 238 09891	Remote RC19335023/01

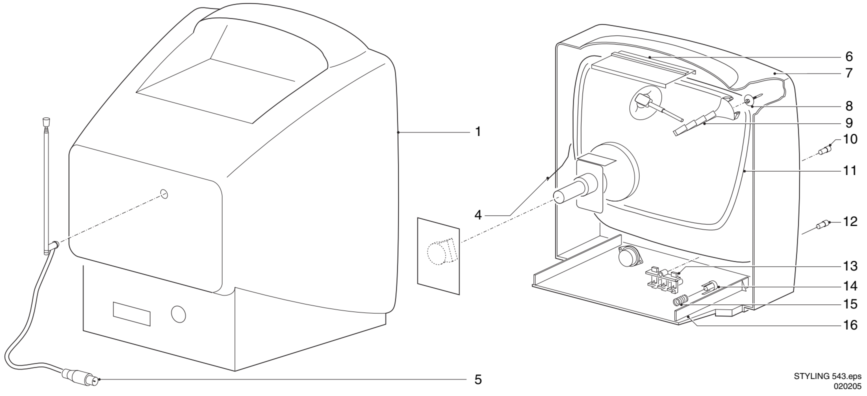
28PW8620/12
32PW8620/12

STYLING 543



RED
IR
V-
V+
V-
V+
C-
C+
C-
C+
Mono
L
R
Video
Audio
- VOLUME +
- PROGRAM +
P+
V-
V+
P-





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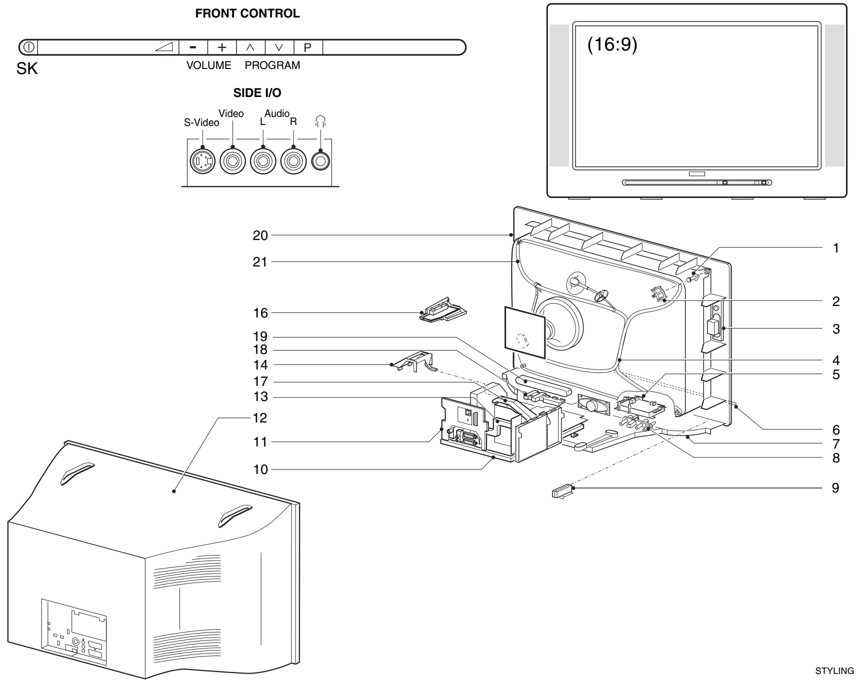
STYLING 543.eps
020205

1	3141 057 69631	Mains knob
2	3141 057 69641	Control knobs
3	3141 054 23081	Light guide
4	3139 124 40331	Chassis guide (HB)
5	3139 124 30881	Chassis guide (VO)
6	3139 120 01611	Word mark
7	3111 254 23481	Coil & THT clamp
8	4822 404 31291	Mains cord bracket
9a*	2422 070 98231	Mains cord
10b*	2422 070 89236	Mains cord
11	3141 057 69621	Cabinet
12	4822 404 30839	Degaussing coil bracket
13	3141 054 23051	Rear cover
14	3139 120 41391	CRT fixing screw
15	9322 191 16682	Picture tube 14" A36AKJ15X07
16	2422 549 45304	Degaussing coil 14"
17	2422 264 00505	Loudspeaker 8Ω 5W
18	3139 123 21491	Insulating plate
19	3141 054 23411	Side AV bracket
a*	3111 257 56161	Single rod antenna
b*	4822 303 91238	Aerial
	6310 200 92021	Remote control RC19335012/01

*a 15PT1767/01
*b 15PT1767/58

STYLING 544


FRONT CONTROL
SK
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+
P
VOLUME
PROGRAM
SIDE I/O
S-Video
Video
Audio
L
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(16:9)
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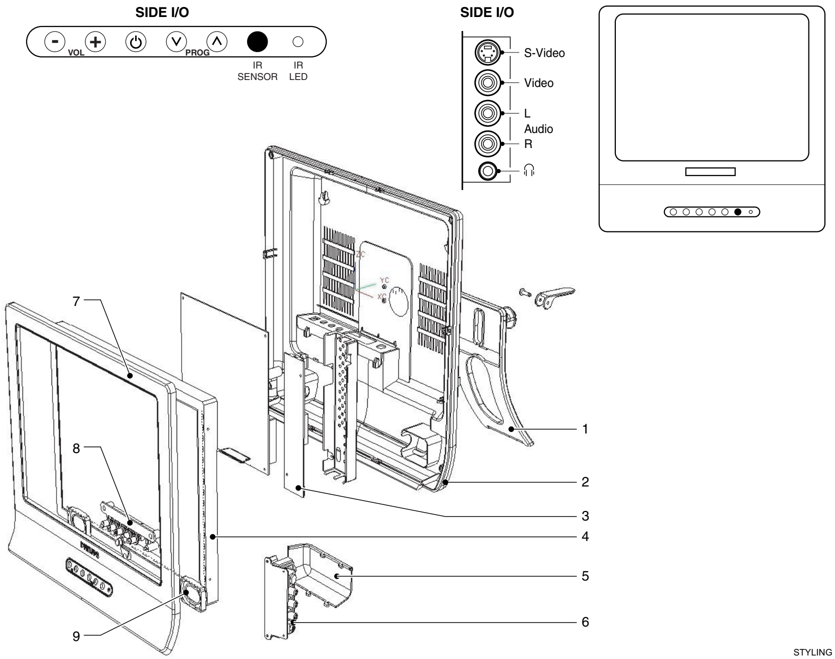
STYLING 544.eps
040205

1	4822 505 11195	CRT Fixing screw
2	4822 403 70906	Degaussing coil bracket
3	2422 264 00491	Loudspeaker 8Ω 10W
4a*	2422 549 00129	Degaussing coil 28”
5	3139 177 87791	Mains knob
6a*	3141 050 00291	Word mark 28”
6b*	3141 050 00281	Word mark 32”
7	4822 404 31291	Mains cord bracket
8	3139 124 62311	Light guide
9	4822 404 31363	Mains cord relief
15	3139 124 46742	SSB bracket
17	3104 304 23011	LOT bracket
18	3139 177 87811	Front control
19	3139 177 87801	Control strip
20a*	3143 027 62211	Cabinet 28”
20b*	3143 027 61901	Cabinet 32”
21	3111 254 23481	Coil & THT clamp
a*	9301 967 10307	Picture tube 28” W66ERF172X044
b*	9301 982 90314	Picture tube 32” W76ERF182X044
	4822 466 11453	Mains cord relief
	4822 321 11499	Mains cord EU
	4822 321 11139	Mains cord
	4822 321 11425	Mains cord
	3104 304 90361	Insulating plate

	3139 147 20911	Tuner UV1316E/A I-4
	3139 238 07441	Remote control RC4330/01H
*a	28PW8720/12	
*b	32PW8720/12	

STYLING 546


SIDE I/O
VOL
PROG
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SENSOR
IR
LED
SIDE I/O
S-Video
Video
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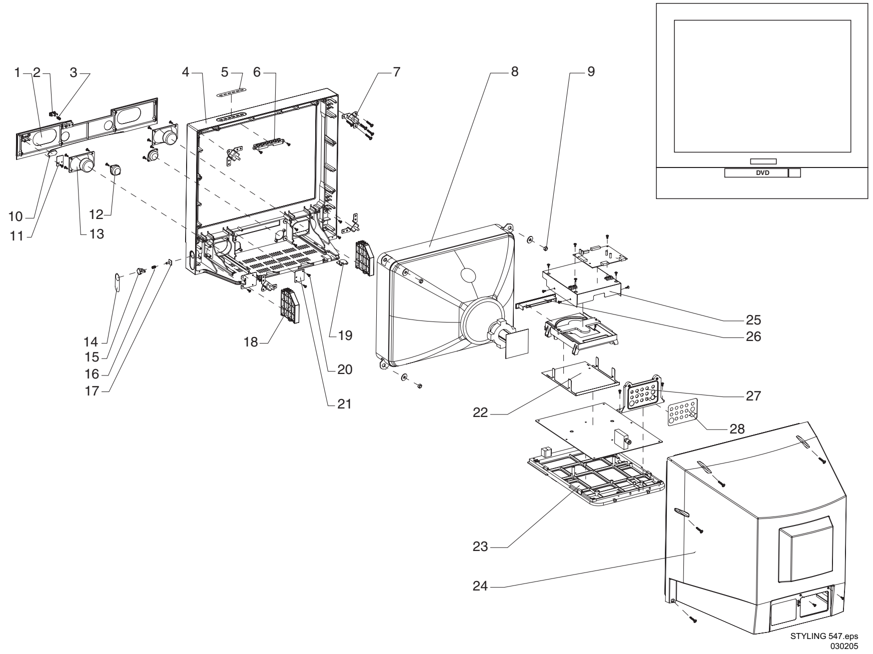
STYLING 546.eps
020205

1	0139 060 20770	Stand
2	9051 101 41960	Rear cover
3	3990 000 10471	Inverter
4	0703 621 12331	LCD screen QD14VL03REV01
5	Not applicable	
6	8411 200 11999	Side AV board
7	9051 001 43110	Cabinet
8	9051 081 42760	Control knobs
9	6102 066 10151	Loudspeaker 8Ω 2W/3W
	3999 170 00181	EURO adapter
	3999 170 00181	UK adapter
	6310 200 01611	Remote control
	8411 800 11999	Front control board

STYLING 547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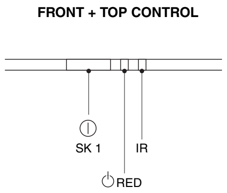
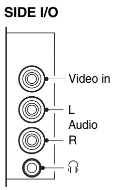
DVD
STYLING 547.eps
030205

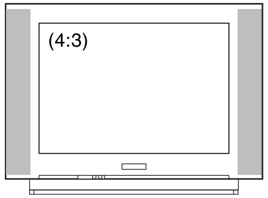
1	996500024320	DVD front panel
2	996500024311	DVD switch knob
3	996500023502	Power knob spring
4	996500024319	Cabinet
5	996500024316	Function inlay
6	996500024313	Button
10	996500024314	Lens
13	996500024308	Loudspeaker 8Ω 5W
14	996500024317	Power inlay
15	996500024315	Power knob
16	996500023468	Power knob spring
17	996500024309	Power knob adapter
18	996500024310	CRT bracket
19	996500023469	Power cord holder
22	996500024326	DVD bottom cover
23	996500024372	Scart bracket
24	996500024260	Rear cabinet
25	996500024325	DVD upper cover
26	996500024312	DVD front door
27	996500024363	Terminal board bracket
28	996500024330	Rear AV inlay
	996500024292	Cord pad spacer
	996500014933	CRT spacer
	996500015608	CRT spacer
	996500014935	Rubber pad
	996500015148	Cable holder
	996500024329	Side AV inlay
	996500026496	CRT bracket
	996500024347	Tuner UV1336I/APGS-3

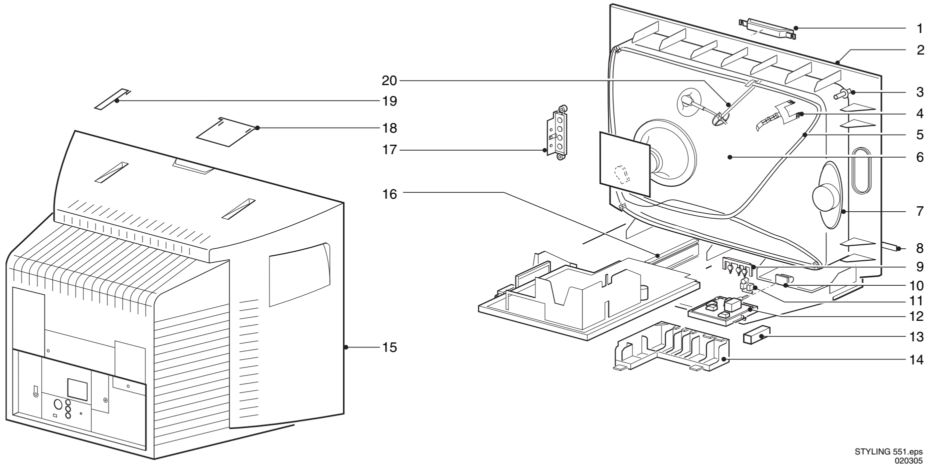
996500024266	Remote control
996500024408	Battery door silver
313912823841	Degaussing coil 21"
996500024318	Word mark

STYLING 551


FRONT + TOP CONTROL
SK 1
IR
RED


SIDE I/O
Video in
L
Audio
R

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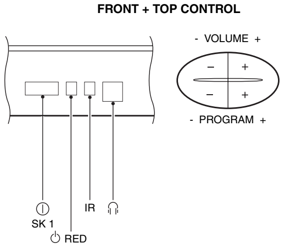
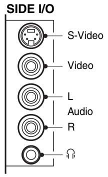
STYLING 551.eps
020305

1	3141 057 65961	Top control
2	3115 109 43071	Cabinet assy
2	3115 108 19801	Cabinet
3	3104 308 77012	CRT fixing screw
4	3141 054 22351	Cable tie
5	3139 128 23201	Degaussing coil 21" Multi voltage
6	9322 196 08682	Picture tube A51LYZ095X01
7	2422 264 00379	Loudspeaker 8R 10W
8	3141 050 00301	Wordmark
10	3139 124 39211	Mains knob
11	3141 057 65651	Light guide
12	3139 124 30434	Front interface bracket
13	3122 224 04623	Mains cord relief
14	3139 124 40321	Front main bracket
15	3115 109 43081	Rear cover
16	3139 124 40331	Chassis guide HB
16	3139 124 25893	Chassis guide V0
17	3139 124 46331	Side AV bracket (3AV+HP)
18	3139 124 39161	V0 plate
20	3139 124 17541	EHT spacer
	3139 128 76091	Mains cord
	3139 228 86482	Remote control RC19042001/01

STYLING 552


FRONT + TOP CONTROL
- VOLUME +
−
+
−
+
- PROGRAM +
SK 1
RED
IR


SIDE I/O
S-Video
Video
L
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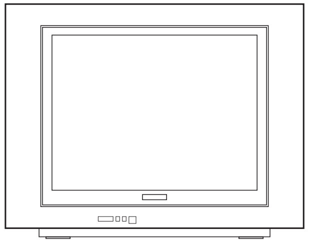

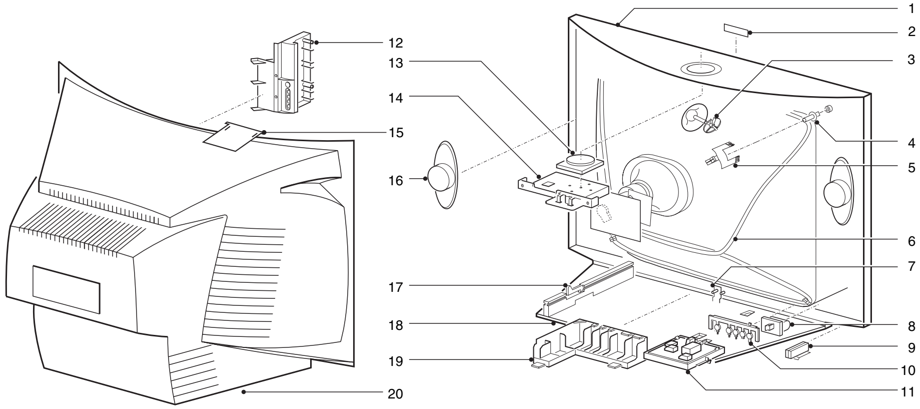
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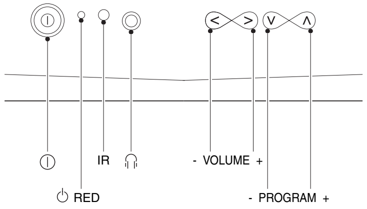
STYLING 552.eps
020305

1	3115 109 42881	Cabinet
2	3141 050 00301	Wordmark
3	3139 124 17541	EHT spacer
4	3104 308 77012	CRT screw
5	3139 124 23861	Spacer
6	3139 128 23201	Degaussing coil 21" (muli voltage)
7	3139 124 32221	Light guide
8	3141 057 81591	Mains knob
9	3122 224 04623	Mains cord relief
10	3141 057 81581	Control knob
12	3115 104 73171	Side AV bracket
15	3139 124 33341	VO plate
16	2422 264 00394	Loudspeaker 8R 5W
17	3139 124 30812	Chassis guide (V0)
20	3115 109 42891	Rear cover
	9322 196 08682	Picture tube A51LYZ095X01
	3139 128 76091	Mains cord
	3139 228 86482	Remote control RC19042001/01

STYLING 553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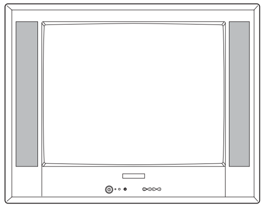
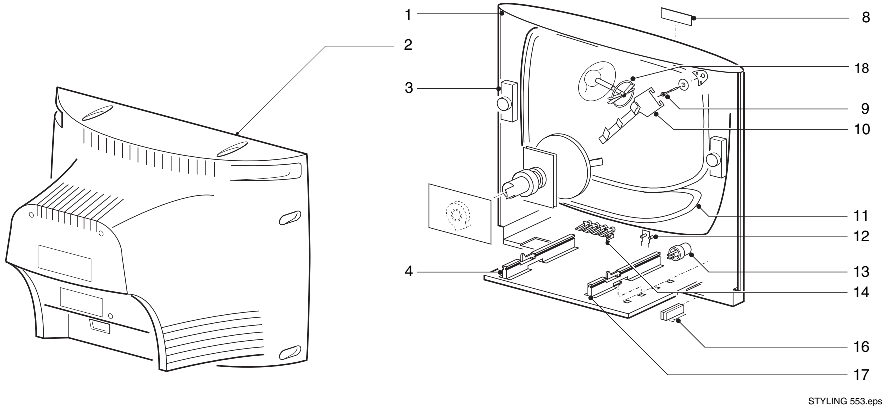
- VOLUME +
RED
- PROGRAM +

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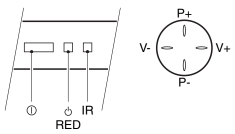
STYLING 553.eps
020305

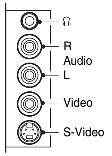
1	3115 109 42951	Cabinet
2	3115 109 42961	Rear cover
3	2422 264 00333	Loudspeaker 16Ω 5W
4	3139 124 23451	Chassis guide (HB)
8	3141 050 00301	Wordmark
9	3115 224 03451	Tube spacer
9	3139 120 41141	CRT fixing screw
10	3139 124 26261	Spacer
11	3139 128 23201	Degaussing coil
12	3139 124 26901	Light guide
13	3141 057 81631	Mains knob
14	3141 057 81621	Control knob
16	3122 224 04623	Mains cord relief
17	3139 124 23461	Chassis guide VO
18	3139 124 17541	EHT spacer
	3115 104 73781	Side AV bracket
	9322 207 01682	Picture tube A51AEZ90X45
	3139 228 86482	Remote control RC19042001/01
	2422 070 98231	Mains cord

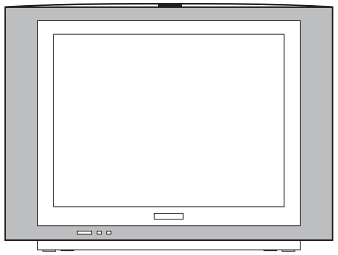
STYLING 554

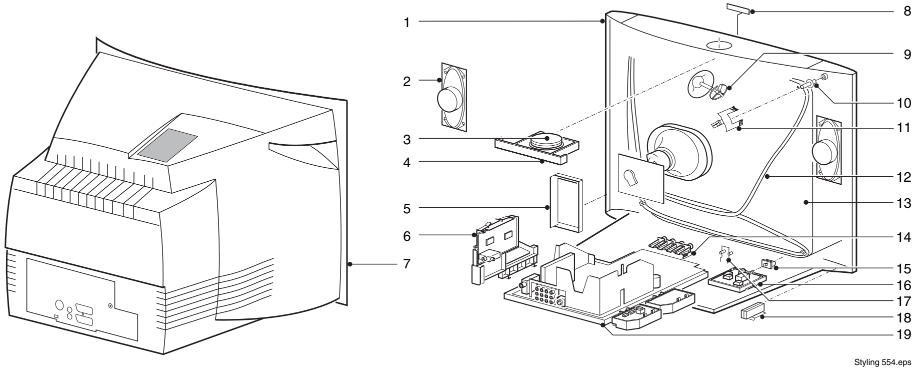
FRONT + TOP CONTROL



SIDE I/O







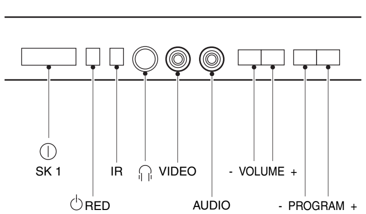
Styling 554.eps
020305

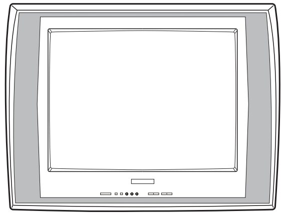
1	3141 047 83121	Cabinet
2	2422 264 00379	Loudspeaker 8R 10W
3	3139 124 30391	Top control button
3+4	3139 137 66921	Top control button assy
3	3139 124 31131	Top control button cover
4	3139 124 30381	Top control bracket
5	3139 124 39541	Side AV bracket (HP+3AV)
6	not applicable	
7	3141 047 65241	Rear cover
8	3141 050 00291	Wordmark
9	3139 124 17541	EHT spacer
10	3139 124 23861	Tube spacer
10	3141 054 22011	Tube spacer
11	not applicable	
12	3139 128 23781	Degaussing coil 29'' (full range)
13	9322 215 00682	Picture tube A68QCP693X1
14	not applicable	
15	3139 138 14831	Mains knob
16	3139 124 30434	Front interface bracket
17	3139 124 30411	Light guide
18	3122 224 04623	Mains cord relief
19	3139 124 33531	Chassis tray
	3139 228 86482	Remote control RC190421/01

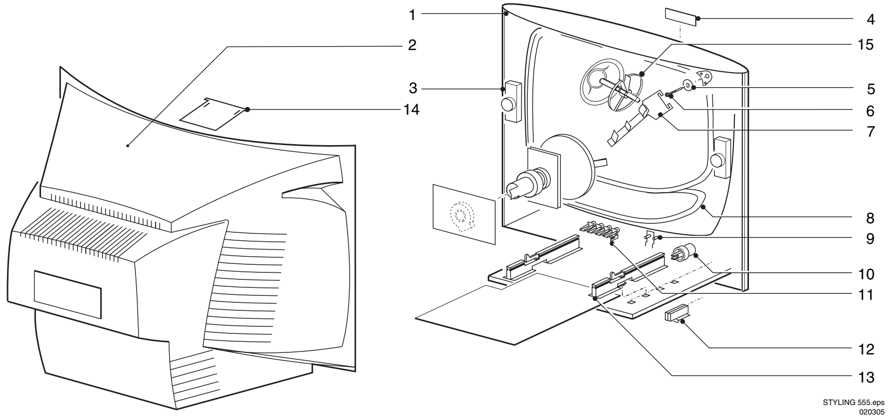
29PT5308

STYLING 555

FRONT CONTROL







STYLING 555.eps
020305

1	3115 109 43011	Cabinet assy
2	3115 109 43021	Rear cover
3	3115 109 43051	Loudspeaker assy
3	2422 264 00333	Loudspeaker 16Ω 5W
4	3141 050 00301	Wordmark
5	3115 104 66421	Spacer
5	3104 308 77012	CRT fixing crew
7	3141 054 22351	Cable tie
8	3139 128 23201	Degaussing coil 21" (multi voltage)
9	3139 124 30821	Light guide
10	3141 057 81881	Mains knob
11	3141 057 81891	Control knob
12	3122 224 04623	Mainscord relief
13	3139 124 30862	Chassis guide (HB)
13	3139 124 30812	Chassis guide (V0)
14	3139 124 30851	VO plate397-13
15	3139 124 17541	EHT spacer
	9322 207 01682	Picture tube A51AEZ90X45